- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that the "Sonos5 System" embodied "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

7.   **Response to Ex. 033-7 ("Spotify System")**

Google summarily contends that a "Spotify System" that allegedly included "Spotify Connect" qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 033-7 at 1. Google's contentions are flawed for various reasons.

As a threshold manner, Google failed to establish that an alleged "Spotify System" that incorporated "Spotify Connect" existed and embodied the technology described in the "Spotify System" documents/things at a time and place that would qualify such a system as prior art to the '033 Patent. Simply put, Google has proffered no evidence of the existence of such a system prior to December 2011, much less prior to July 2011. In this regard, Google's "Spotify System" that allegedly incorporates "Spotify Connect" comprises documents/things for several different systems from different entities, including "Pinell," "Spotify," "ONKYO," "Denon," and "Logitech." However, "Pinell," "ONKYO," and "Denon" did not incorporate "Spotify Connect" in their respective systems until after September 2013 when Spotify first announced "Spotify Connect." *See, e.g.*, SONOS-SVG2-00059375 at 375 (September 3, 2013 announcement from Spotify, stating that "Spotify Connect will be available on … Denon"); SONOS-SVG2-00059373 at 373 (September 9, 2013 announcement from Frontier Silicon, stating that "Frontier Silicon launches Spotify Connect on Venice 6.5 connected audio module" and "Customers supplied by Frontier Silicon include … Pinell"); SONOS-SVG2-00059367 at 367 at (November

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6, 2014 article announcing that "Onkyo has released a firmware update that adds Spotify

Connect to its network-enabled 2014 AV receivers and home theater packages."); SONOS-

SVG2-00059352 at 352 (providing December 27, 2014 firmware update for "Onkyo TX-NR515

Network A/V Receiver " that "[a]dds support of Spotify Connect"); SONOS-SVG2-00059353 at

353 (Onkyo adding support for "Spotify Connect" on "18 December 2014" for "TX-NR515 /

TX-NR515AE / HT-R791"). Moreover, Google has failed to establish that Logitech ever

incorporated "Spotify Connect" into a "Squeezebox" system, much less at a time and place that

would qualify the system as prior art to the '033 Patent. Contrary to Google's contention,

"Squeezebox" users have commented that "[t]he Squeezebox is not a Spotify Connect system."

SONOS-SVG2-00059350 at 350; *see also, e.g.,* SONOS-SVG2-000593382 at 382-383.

Accordingly, Google's "Spotify System" contentions are fatally flawed.

Google has also failed to establish that all of the documents upon which it relies were

published or known before the invention of the '033 Patent. The '033 Patent was conceived by

July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and

Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least six of the

"Spotify System" documents/things are dated after July 15, 2011. *See* Google's Invalidity

Contentions, Ex. 033-7, [1][11], [3]-[5], [11]-[12]. Consequently, the "Spotify System" as

allegedly demonstrated by these documents is disqualified as prior art to the '033 Patent at least

under § 102(a).

Further, Google has failed to establish that the "Spotify System" qualifies as prior art

under 35 U.S.C. § 102(b). The '033 Patent has an effective filing date no later than December

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[11] While Google alleges that document [1] has a copyright date of "2009," the metadata of
document [1] indicates a "2015" creation and modified date.

30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories

(No. 1). Because Google has not established that at least ten "Spotify System" documents/things

were actually published more than a year before this effective filing date, the "Spotify System"

as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '033

Patent. *See* Google's Invalidity Contentions, Ex. 033-7, [1], [3]-[8], [11]-[13].

Google has also failed to establish that the "Spotify System" is prior art under 35 U.S.C.

§ 102(g). Indeed, Google has failed to establish either (i) that the "Spotify System" was reduced

to practice in the United States in a physical embodiment that met each and every limitation of

each of the asserted claims of the '033 Patent, (ii) that the "Spotify System" ever worked for its

intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the

"Spotify System" was not abandoned, suppressed, or concealed after being reduced to practice in

such a manner. Moreover, Google has failed to even identify "another inventor."

Because Google failed to establish that a "Spotify System" incorporating "Spotify

Connect" existed at a time and place that would qualify it as a prior art against the '033 Patent,

Google's contentions regarding the alleged "Spotify System" are irrelevant. Nevertheless, when

the asserted claims of the '033 Patent are properly construed, in light of the specification, the

level of ordinary skill of one in the art, and the state of technology at issue at the time of the

alleged invention, Google's current invalidity contentions fail to demonstrate that the "Spotify

System" either anticipates or renders obvious at least the following limitations of the asserted

claims of the '033 Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured
  for playback of a remote playback queue provided by a cloud-based computing
  system associated with a cloud-based media service]
    - at least because Google has failed to establish that the "Spotify System"
      embodied "operating in a first mode in which the computing device is

configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service."

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish that the "Spotify System" embodied "operating in the first mode," much less "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each . . . available to accept playback responsibility for the remote playback queue"

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
    - at least because Google has failed to establish that the "Spotify System" embodied "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
    - at least because Google has failed to establish that the "Spotify System" embodied "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i), (ii), and (iii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
    - at least because Google has failed to establish that the "Spotify System" embodied "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

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- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
    - o at least because Google has failed to establish that the "Spotify System" embodied "detecting the indication," "the first mode" and "a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
    - o at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 1 and 12 and (ii) that the "Spotify System" embodied that "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service."

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]
    - o at least because Google has failed to establish (i) that the "Spotify System" embodied independent claim 1 and (ii) that the "Spotify System" embodied "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]

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     o   at least because Google has failed to establish (i) that the "Spotify System" embodied independent claim 1 and (ii) that the "Spotify System" embodied wherein "operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device" and "transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
  - at least because Google has failed to establish (i) that the "Spotify System" embodied independent claim 1, (ii) that the "Spotify System" embodied dependent claim 7, and (iii) that the "Spotify System" embodied "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons."

- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
  - at least because Google has failed to establish that the "Spotify System" embodied independent claim 1, (ii) that the "Spotify System" embodied dependent claim 7, and (iii) that the "Spotify System" embodied dependent claim 8.

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
  - at least because Google has failed to establish (i) that the "Spotify System" embodied independent claim 1 and (ii) that the "Spotify System" embodied "displaying . . . in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]

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    o   at least because Google has failed to establish (i) that the "Spotify System" embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that the "Spotify System" embodied "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

       8.   **Response to Ex. 033-8 ("Squeezebox System")**

Google summarily contends that the "Squeezebox System" qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 033-8 at 1. Google's contentions are flawed for various reasons.

Google failed to establish that all of the documents upon which it relies were published or known before the invention of the '033 Patent. The '033 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least one of the "Squeezebox System" documents/things is dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 033-8, [1]. Consequently, the "Squeezebox System" as allegedly demonstrated by this document is disqualified as prior art to the '033 Patent at least under § 102(a).

Further, Google has failed to establish that the "Squeezebox System" qualifies as prior art under 35 U.S.C. § 102(b). The '033 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that at least five "Squeezebox System" documents/things were actually published more than a year before this effective filing date, the "Squeezebox System" as allegedly demonstrated by these documents fail to qualify as § 102(b) prior art to the '033 Patent. *See* Google's Invalidity Contentions, Ex. 033-8, [1], [12]-[15].

Google has also failed to establish that the "Squeezebox System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Squeezebox System" was reduced to practice in the United States in a physical embodiment that met each and every

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limitation of each of the asserted claims of the '033 Patent, (ii) that the "Squeezebox System" ever worked for its intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the "Squeezebox System" was not abandoned, suppressed, or concealed after being reduced to practice in such a manner. Moreover, Google has failed to even identify "another inventor."

Assuming, for the sake of argument, that the "Squeezebox System" qualifies as prior art, when the asserted claims of the '033 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the "Squeezebox System" either anticipates or renders obvious the asserted claims of the '033 Patent.

For instance, Google has failed to establish that the "Squeezebox System" anticipates or renders obvious at least the following limitations of the asserted claims of the '033 Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
    o at least because Google has failed to provide Sonos with adequate notice of what Google even contends amounts to the claimed "computing device." *Compare, e.g.*, Google's Invalidity Contentions, Ex. 033-8, [1Pre] ("Squeezebox System discloses a computing device (e.g. a phone or a Squeezebox radio) . . . .") *with* [1a] ("Squeezebox System discloses the computing device (e.g. a phone or computer) . . . .")

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
    o at least because Google has failed to establish that the "Squeezebox System" embodied "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

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- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i), (ii), and (iii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "detecting the indication" and "transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

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- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 1 and 12 and (ii) that the "Squeezebox System" embodied "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service."

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claim 1 and (ii) that the "Squeezebox System" embodied "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue" and "wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claim 1 and (ii) that the "Squeezebox System" embodied "operating in the first mode" and "transitioning from the first mode to the second mode" much less that such transitioning "further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at

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least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]

- o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claim 1, (ii) that the "Squeezebox System" embodied dependent claim 7, and (iii) that the "Squeezebox System" embodied "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons."

- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
  - o at least because Google has failed to establish that the "Squeezebox System" embodied independent claim 1, (ii) that the "Squeezebox System" embodied dependent claim 7, and (iii) that the "Squeezebox System" embodied dependent claim 8.

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claim 1 and (ii) that the "Squeezebox System" embodied "displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that the "Squeezebox System" embodied "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

9. Response to Ex. 033-9 ("Weel")

Google summarily contends that U.S. Patent Publication No. 2005/0251566 ("Weel") qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 102(a) and (b). Google's

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Invalidity Contentions, Ex. 033-9 at 1. However, when the asserted claims of the '033 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that Weel either anticipates or renders obvious the asserted claims of the '033 Patent.

For instance, Google has failed to establish that Weel anticipates or renders obvious at least the following limitations of the asserted claims of the '033 Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
  - o   at least because Google has failed to establish that Weel teaches or suggests "a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service."

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
  - o   at least because Google has failed to establish that Weel teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
  - o   at least because Google has failed to establish that Weel teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media

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item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]

- o at least because Google has failed to establish that the Weel teaches or suggests "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i) and (ii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
  - o at least because Google has failed to establish that Weel teaches or suggests "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
  - o at least because Google has failed to establish that the Weel teaches or suggests "detecting the indication" and "the remote playback queue" provided by the cloud-based computing system, let alone "after detecting the indication, transitioning … to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
  - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 1 and 12 and (ii) that Weel teaches or suggests "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service."

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for

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synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]

- o at least because Google has failed to establish (i) that Weel teaches or suggests independent claim 1 and (ii) that Weel teaches or suggests "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
    - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claim 1 and (ii) that Weel teaches or suggests "the remote playback queue" provided by the cloud-based computing system or "transitioning from the first mode to the second mode."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
    - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claim 1, (ii) that Weel teaches or suggests dependent claim 7, and (iii) that Weel teaches or suggests "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation" and "based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device"

- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]

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- o   at least because Google has failed to establish that Weel teaches or suggests independent claim 1, (ii) that Weel teaches or suggests dependent claim 7, (iii) that Weel teaches or suggests dependent claim 8, and (iv) that Weel teaches or suggests "the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation."

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
    - o   at least because Google has failed to establish (i) that Weel teaches or suggests independent claim 1 and (ii) that Weel teaches or suggests "displaying . . . in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
    - o   at least because Google has failed to establish (i) that Weel teaches or suggests embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that Weel teaches or suggests "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

10.   Response to Ex. 033-10 ("Qureshey")

Google summarily contends that U.S. Patent No. 8,050,652 ("Qureshey") qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 102(a) and (e). Google's Invalidity Contentions, Ex. 033-10 at 1. However, when the asserted claims of the '033 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that Qureshey either anticipates or renders obvious the asserted claims of the '033 Patent.

For instance, Google has failed to establish that Qureshey anticipates or renders obvious at least the following limitations of the asserted claims of the '033 Patent:

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- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
    - at least because Google has failed to establish that Qureshey teaches or suggests "a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service." *See, e.g.*, Google's Invalidity Contentions, Ex. 033-10, [1a] ("Qureshey discloses the computing device (e.g. a phone or computer) operating in a first mode in which the computing device is configured for playback of a remote playback queue (e.g. a YouTube watch-next queue) provided by a cloud-based computing system (e.g. the MDx server) associated with a cloud-based media service (e.g. a YouTube content server).")

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish that Qureshey teaches or suggests limitation [1.3]/[12.1], let alone "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
    - at least because Google has failed to establish that Qureshey teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
    - at least because Google has failed to establish that Qureshey teaches or suggests "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the

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instruction" that "configures the at least one given playback device" in accordance with claim limitations (i), (ii), and (iii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
    o at least because Google has failed to establish that Qureshey teaches or suggests "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
    o at least because Google has failed to establish that the Qureshey teaches or suggests "detecting the indication," let alone "after detecting the indication, transitioning … to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
    o at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 1 and 12 and (ii) that Qureshey teaches or suggests "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," much less "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service"

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]

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- o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claim 1 and (ii) that Qureshey teaches or suggests "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
  - o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claim 1 and (ii) that Qureshey teaches or suggests "the remote playback queue" provided by the cloud-based computing system or "transitioning from the first mode to the second mode."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
  - o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claim 1, (ii) that Qureshey teaches or suggests dependent claim 7, and (iii) that Qureshey teaches or suggests "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons."

- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
  - o   at least because Google has failed to establish that Qureshey teaches or suggests independent claim 1, (ii) that Qureshey teaches or suggests dependent claim 7, and (iii) that Qureshey teaches or suggests dependent claim 8.

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]

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- at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claim 1 and (ii) that Qureshey teaches or suggests "displaying . . . in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish (i) that Qureshey teaches or suggests embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that Qureshey teaches or suggests "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

11.   Response to Ex. 033-11 ("Jannink" and "Al-Shaykh")

Google summarily contends that U.S. Patent Publication No. 2008/0120501 ("Jannink") and U.S. Patent Publication No. 2011/0131520 ("Al-Shaykh") qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 103. Google's Invalidity Contentions, Ex. 033-11 at 1. However, Google failed to articulate any specific reason as to why a person of ordinary skill in the art would have been motivated to combine Jannink and Al-Shaykh, much less in the specific manner to achieve the asserted claims. *See id.* Google has also failed to provide Sonos with adequate notice of how Google is proposing that the teachings of Jannink and Al-Shaykh would have been combined and what in this purported combination Google contends amounts to the claimed "computing device," "cloud-based computing system associated with a cloud-based media service," and "remote playback queue," among other deficiencies.

Further, when the asserted claims of the '033 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the combination of Jannink and Al-Shaykh anticipates or renders obvious the asserted claims of the '033 Patent.

For instance, Google has failed to establish that the combination of Jannink and Al-Shaykh anticipates or renders obvious at least the following limitations of the asserted claims of the '033 Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
  - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service."

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
  - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "operating in the first mode," let alone "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
  - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
  - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the

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computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i), (ii), and (iii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
    - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
    - o at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "detecting the indication," "the remote playback queue," or "after detecting the indication, transitioning … to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
    - o at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 1 and 12 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service."

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]

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- o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
  - o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests wherein "operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device" and "transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
  - o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claim 1, (ii) that the combination of Jannink and Al-Shaykh teaches or suggests dependent claim 7, and (iii) that the combination of Jannink and Al-Shaykh teaches or suggests "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation" and "based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device."

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- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
  - at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests independent claim 1, (ii) that the combination of Jannink and Al-Shaykh teaches or suggests dependent claim 7, (iii) that the combination of Jannink and Al-Shaykh teaches or suggests dependent claim 8, and (iv) that the combination of Jannink and Al-Shaykh teaches or suggests "wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation."

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
  - at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "displaying a representation of one or more playback devices in a media playback system that are each . . . available to accept playback responsibility for the remote playback queue," much less "displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
  - at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

12.   Response to Ex. 033-12 ("Volk" and "Al-Shaykh")

Google summarily contends that U.S. Patent No. 7,720,686 ("Volk") and U.S. Patent Publication No. 2011/0131520 ("Al-Shaykh") qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 103. Google's Invalidity Contentions, Ex. 033-11 at 1. However, Google failed to articulate any specific reason as to why a person of ordinary skill in the art would have been motivated to combine Volk and Al-Shaykh. *See id.* Google has also failed to provide Sonos

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with adequate notice of how Google is proposing that the teachings of Volk and Al-Shaykh

would have been combined and what in this purported combination Google contends amounts to

the claimed "computing device," "cloud-based computing system associated with a cloud-based

media service," and "remote playback queue," among other deficiencies.

Further, when the asserted claims of the '033 Patent are properly construed, in light of the

specification, the level of ordinary skill of one in the art, and the state of technology at issue at

the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that

the combination of Volk and Al-Shaykh anticipates or renders obvious the asserted claims of the

'033 Patent.

For instance, Google has failed to establish that the combination of Volk and Al-Shaykh

anticipates or renders obvious at least the following limitations of the asserted claims of the '033

Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service."

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "operating in the first mode," let alone "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]

    ○ at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i) and (ii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "detecting the indication," "the remote playback queue," or "after detecting the indication, transitioning … to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying

the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]

- o   at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 1 and 12 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests that "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service."

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]
    - o   at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
    - o   at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests wherein "operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device" and "transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control

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playback of the remote playback queue by the at least one playback device instead of the computing device."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
  - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claim 1, (ii) that the combination of Volk and Al-Shaykh teaches or suggests dependent claim 7, and (iii) that the combination of Volk and Al-Shaykh teaches or suggests "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation" and "based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device."

- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests independent claim 1, (ii) that the combination of Volk and Al-Shaykh teaches or suggests dependent claim 7, (iii) that the combination of Volk and Al-Shaykh teaches or suggests dependent claim 8, and (iv) that the combination of Volk and Al-Shaykh teaches or suggests "wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation."

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
  - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claim 1 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "displaying a representation of one or more playback devices in a media playback system that are each . . . available to accept playback responsibility for the remote playback queue," much less "displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon

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indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests embodied independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

13.   Response to Ex. 033-13 ("DLNA")

Google summarily contends that "DLNA" qualifies as prior art to the '033 Patent under pre-AIA 35 U.S.C. § 102(a) and (b). Google's Invalidity Contentions, Ex. 033-13 at 1. Google's contentions are flawed for various reasons.

For instance, what Google refers to as "DLNA" is actually a collection of "[g]uidelines" that include "two volumes covering [a]rchitecture and [p]rotocols and [m]edia [f]ormats," to provide "vendors with the information needed to build interoperable networked platforms and devices for the digital home." DLNA at Introduction. In this regard, "DLNA" is a collection of guidelines that incorporate several standards, including Universal Plug and Play ("UPnP") for media management and device discovery and control, which in of itself includes at least 18 different documents that were created by various authors at various different times over the course of more than 10 years. For at least these reasons, Google has failed to establish that this collection of "DLNA" materials forms a single reference that can anticipate the asserted claims under 35 U.S.C. § 102.

Assuming, for the sake of argument, that "DLNA" is a single reference, when the asserted claims of the '033 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged

invention, Google's current invalidity contentions fail to demonstrate that "DLNA" either

anticipates or renders obvious the asserted claims of the '033 Patent.

For instance, Google has failed to establish that "DLNA" anticipates or renders obvious

at least the following limitations of the asserted claims of the '033 Patent:

- [1.3]/[12.1] [operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service."

- [1.4]/[12.2] [while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "operating in the first mode," let alone "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are . . . available to accept playback responsibility for the remote playback queue."

- [1.5]/[12.3] [while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system," much less "while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices."

- [1.6]/[12.4] [based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "based on receiving the user input, transmitting an instruction for the

at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device," let alone "the instruction" that "configures the at least one given playback device" in accordance with claim limitations (i), (ii), and (iii).

- [1.7]/[12.5] [detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device]
    - at least because Google has failed to establish that "DLNA" teaches or suggests "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device."

- [1.8]/[12.6] [after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue]
    - at least because Google has failed to establish that "DLNA" teaches or suggests "detecting the indication," "the first mode," "the remote playback queue," or "transitioning . . . to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue."

- [2.1]/[13.1] [wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service]
    - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 1 and 12 and (ii) that "DLNA" teaches or suggests "an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service"

- [4.1] [wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices]

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- o at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 1 and (ii) that "DLNA" teaches or suggests "at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue," and "user input indicating a selection of the group of playback devices."

- [7.0-7.2] [The computing device of claim 1, wherein: operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device; transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device.]
  - o at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 1 and (ii) that "DLNA" teaches or suggests wherein "operating in the first mode further involves providing a control interface comprising one or more selectable control icons that are configured to control playback of the remote playback queue by the computing device" and "transitioning from the first mode to the second mode further involves modifying the control interface such that the one or more selectable control icons are configured to control playback of the remote playback queue by the at least one playback device instead of the computing device."

- [8.0-8.2] [The computing device of claim 7, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation; and based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device.]
  - o at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 1, (ii) that "DLNA" teaches or suggests dependent claim 7, and (iii) that "DLNA" teaches or suggests "after transitioning to the second mode, receiving user input indicating a selection of a given control icon of the one or more selectable control icons, wherein the given control icon corresponds to a given transport control operation" and "based on receiving the user input indicating the selection of the given control icon, causing the corresponding transport control operation to be executed by the given playback device."

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- [9.0-9.1] [The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.]
    - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 1, (ii) that "DLNA" teaches or suggests dependent claim 7, (iii) that the "DLNA" teaches or suggests dependent claim 8, and (iv) that "DLNA" teaches or suggests "wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation."

- [11.1] [displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred]
    - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 1 and (ii) that "DLNA" teaches or suggests "displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred."

- [16.1] [before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue]
    - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claim 15 (which mirrors independent claims 1 and 12) and (ii) that "DLNA" teaches or suggests "displaying the representation of the one or more playback devices," much less "before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue."

D.   '615 Patent

1.   Response to Ex. 615-1 ("Tungsten System")

Google summarily contends that the "Tungsten System" qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g) and "prior inventors for purposes of Section 102(g)[ ] includ[e] … Eugene Koh, Jason Simmons, John Grossman, and Dmitry Dolinsky." Google's Invalidity Contentions, Ex. 615-1 at 1-2. Google's contentions are flawed for various reasons.

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For instance, Google failed to adequately establish the existence of a "Tungsten System" at a time and place that would qualify it as prior art against the '615 Patent, much less the existence of a "Tungsten System" that actually operated and did so for its intended purposes. Indeed, while Google cites to high-level source code directories and sub-directories, Google has failed to identify specific source-code functions that allegedly satisfy the claim limitations or even explain how or why the cited source code allegedly satisfies the claim limitations. Thus, Google has failed to establish the existence of a "Tungsten System" that functioned in a manner to satisfy each and every limitation of the asserted claims.

Google also failed to establish that all of the documents/things upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, the two "Tungsten Requirements" documents identified by Google are undated or dated after July 15, 2011. *See* GOOG-SONOSWDTX-00052653; GOOG-SONOSWDTX-00052780. Consequently, the "Tungsten System" as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at least under § 102(a).

Google has also failed to establish that the "Tungsten System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that any of the "Tungsten System" documents/things were actually published more than a year before this effective filing date, the "Tungsten System" as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-1, documents [1]-[5].

Further, Google has failed to establish that the "Tungsten System" is prior art under 35
U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Tungsten System" was
reduced to practice in the United States in a physical embodiment that met each and every
limitation of each of the asserted claims of the '615 Patent, (ii) that the "Tungsten System" ever
worked for its intended purpose after being reduced to practice in the aforementioned manner –
e.g., GOOG-SONOSWDTX-00052780 ("WORK IN PROGRESS" even as of December 13,
2011) – or (iii) that the "Tungsten System" was not abandoned, suppressed, or concealed after
being reduced to practice in such a manner.

Assuming, for the sake of argument, that the "Tungsten System" qualifies as prior art,
when the asserted claims of the '615 Patent are properly construed, in light of the specification,
the level of ordinary skill of one in the art, and the state of technology at issue at the time of the
alleged invention, Google's current invalidity contentions fail to demonstrate that the "Tungsten
System" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the "Tungsten System" anticipates or
renders obvious at least the following limitations of the asserted claims of the'615 Patent:

- [13.2]/[25.6] [after connecting to a local area network …, identifying playback
  devices connected to the local area network]
    - at least because Google has failed to establish that the "Tungsten System"
      embodied "identifying playback devices connected to the local area network."

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for
  transferring playback from the control device]
    - at least because Google has failed to establish that the "Tungsten System"
      embodied "a selectable option for transferring playback from the control
      device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to
  a particular playback device, wherein the set of inputs comprises: (i) a selection of the
  selectable option for transferring playback from the control device and (ii) a selection
  of the particular playback device from the identified playback devices connected to
  the local area network]

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- o   at least because Google has failed to establish that the "Tungsten System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
    - o   at least because Google has failed to establish that the "Tungsten System" embodied [13.4]/[25.8].

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
    - o   at least because Google has failed to establish that the "Tungsten System" embodied claim limitations "(a)" and "(b)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
    - o   at least because Google has failed to establish that the "Tungsten System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]

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  o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]
    o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
    o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control

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interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]

- o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]

  - o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]

  - o at least because Google has failed to establish (i) that the "Tungsten System" embodied independent claims 13 and 25 and (ii) that the "Tungsten System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

2.   **Response to Ex. 615-2 ("Nexus Q System")**

Google summarily contends that the "Nexus Q System" qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g) and "prior inventors for purposes of Section 102(g)[ ] includ[e] … Eugene Koh, Jason Simmons, John Grossman, and Dmitry

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Dolinsky." Google's Invalidity Contentions, Ex. 615-2 at 1-2. Google's contentions are flawed for various reasons.

For instance, Google failed to adequately establish the existence of a "Nexus Q System" at a time and place that would qualify it as prior art against the '615 patent, much less the existence of a "Nexus Q System" that actually operated and did so for its intended purposes. Indeed, the "Nexus Q System" had many short comings even after the '615 Patent was conceived and reduced to practice. *See, e.g.,* SONOS-SVG2-00059360 at 363 ("The goal was to re-create this social streaming situation that we were shown during the [2012] Google I/O keynote -- namely, people queuing up their favorite tunes and most hilarious YouTube clips. That experiment turned out to be rather less exciting when we learned that re-creating this situation was impossible. The app, of course, is wholly incompatible with their non-Jelly Bean devices."); SONOS-SVG2-00059355 at 355 (June 27, 2012 article noting that "[r]ight now, the only device that works with Nexus Q is the Nexus 7 tablet from Google and Asus that was also made available at yesterday's Google I/O opening keynote."). Further, while Google cites to the same high-level source code directories and sub-directories cited for the "Tungsten System," Google has failed to identify specific source-code functions that allegedly satisfy the claim limitations or even explain how or why the cited source code allegedly satisfies the claim limitations. Thus, Google has failed to establish the existence of a "Nexus Q System" that functioned in a manner to satisfy each and every limitation of the asserted claims.

Google also failed to establish that all of the documents/things upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least twelve of the

"Nexus Q System" documents/things are either undated or dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 615-2, [2]-[7], [9]-[14]. Consequently, the "Nexus Q System" as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at least under § 102(a). What's more, by Google's own admission, the "Nexus Q System" allegedly was reduced to practice on June 27, 2012, which is after the invention of the '615 Patent. Thus, the "Nexus Q System" cannot possibly qualify as prior art to the '615 Patent under § 102(a).

Google has also failed to establish that the "Nexus Q System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that any of the nineteen "Nexus Q System" documents/things were actually published more than a year before this effective filing date, the "Nexus Q System" as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '615 Patent. What's more, by Google's own admission, the "Nexus Q System" allegedly was reduced to practice on June 27, 2012, which is after the invention of the '615 Patent. Thus, the "Nexus Q System" cannot possibly qualify as prior art to the '615 Patent under §§ 102(a) or (b).

Google has also failed to establish that the "Nexus Q System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Nexus Q System" was reduced to practice in the United States in a physical embodiment that met each and every limitation of each of the asserted claims of the '615 patent, (ii) that the "Nexus Q System" ever worked for its intended purpose after being reduced to practice in the aforementioned manner, or

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(iii) that the "Nexus Q System" was not abandoned, suppressed, or concealed after being reduced to practice in such a manner.

Assuming, for the sake of argument, that the "Nexus Q System" qualifies as prior art, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the "Nexus Q System" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the "Nexus Q System" anticipates or renders obvious at least the following limitations of the asserted claims of the'615 Patent:

- [13.1]/[25.5] [causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device."

- [13.2]/[25.6] [after connecting to a local area network …, identifying playback devices connected to the local area network]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "identifying playback devices connected to the local area network."

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - at least because Google has failed to establish that the "Nexus Q System" embodied claim limitations "(a)" and "(b)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - at least because Google has failed to establish that the "Nexus Q System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 13 and 25 and (ii) that the "Nexus Q System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of

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inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

> at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 1 and 25 and (ii) that the "Nexus Q System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 13 and 25 and (ii) that the "Nexus Q System" embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 13 and 25 and (ii) that the "Nexus Q System" embodied "causing the graphical interface to display the one or more transport

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controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
    - o at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 13 and 25 and (ii) that the "Nexus Q System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
    - o at least because Google has failed to establish (i) that the "Nexus Q System" embodied independent claims 13 and 25 and (ii) that the "Nexus Q System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

3.   Response to Ex. 615-3 ("YT Remote System")

Google summarily contends that the "YT Remote System" qualifies as prior art to the

'615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g) and "prior inventors under Section

102(g)[ ] includ[e] … Ramona Bobohalma." Google's Invalidity Contentions, Ex. 615-3 at 1-2.

Google's contentions are flawed for various reasons.

For instance, Google failed to adequately establish the existence of a "YT Remote

System" at a time and place that would qualify it as prior art against the '615 patent, much less

the existence of a "YT Remote System" that actually operated and did so for its intended

purposes. Indeed, while Google cites to high-level source code directories and sub-directories,

Google has failed to identify specific source-code functions that allegedly satisfy the claim

limitations or even explain how or why the cited source code allegedly satisfies the claim

limitations. Thus, Google has failed to establish the existence of a "YT Remote System" that

functioned in a manner to satisfy each and every limitation of the asserted claims.

Google also failed to establish that all of the documents/things upon which it relies were

published or known before the invention of the '615 Patent. The '615 Patent was conceived by

July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and

Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least four of the

"YT Remote System" documents/things are either undated or dated after July 15, 2011. *See*

Google's Invalidity Contentions, Ex. 615-3, [3] (produced as GOOG-SONOS-WDTX-INV-

00001336), [6] (produced as GOOG-SONOS-WDTX-INV-00001344), [7] (produced as GOOG-

SONOS-WDTX-INV-00001354), [9] (produced as GOOG-SONOS-WDTX-INV-00015421).

Consequently, the "YT Remote System" as allegedly demonstrated by these documents is

disqualified as prior art to the '615 Patent at least under § 102(a).

Google has also failed to establish that the "YT Remote System" qualifies as prior art

under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December

30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories

(No. 1). Because Google has not established that at least four "YT Remote System"

documents/things were actually published more than a year before this effective filing date, the

"YT Remote System" as allegedly demonstrated by these documents fail to qualify as § 102(b)

prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-3, [3], [6], [7], [9].

Google has also failed to establish that the "YT Remote System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "YT Remote System" was reduced to practice in the United States in a physical embodiment that met each and every limitation of each of the asserted claims of the '615 patent, (ii) that the "YT Remote System" ever worked for its intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the "YT Remote System" was not abandoned, suppressed, or concealed after being reduced to practice in such a manner.

Assuming, for the sake of argument, that the "YT Remote System" qualifies as prior art, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the "YT Remote System" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the "YT Remote System" anticipates or renders obvious at least the following limitations of the asserted claims of the '615 Patent:

- [13.2]/[25.6] [after connecting to a local area network via a network interface, identifying playback devices connected to the local area network]
    - at least because Google has failed to establish that the "YT Remote System" embodied "identifying playback devices connected to the local area network."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
    - at least because Google has failed to establish that the "YT Remote System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]

- o at least because Google has failed to establish that the "YT Remote System" embodied [13.4]/[25.8].

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - o at least because Google has failed to establish that the "YT Remote System" embodied claim limitations "(a)" and "(b)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - o at least because Google has failed to establish that the "YT Remote System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - o at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 13 and 25 and (ii) that the "YT Remote System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more

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transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

- o at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 1 and 25 and (ii) that the "YT Remote System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 13 and 25 and (ii) that the "YT Remote System" embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 13 and 25 and (ii) that the "YT Remote System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

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- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
    - at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 13 and 25 and (ii) that the "YT Remote System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
    - at least because Google has failed to establish (i) that the "YT Remote System" embodied independent claims 13 and 25 and (ii) that the "YT Remote System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

4.   Response to Ex. 615-4 ("Twonky System")

Google summarily contends that the "Twonky System" qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 615-4 at 1. Google's contentions are flawed for various reasons.

For instance, Google failed to adequately establish the existence of a "Twonky System" at a time and place that would qualify it as prior art against the '615 patent, much less the existence of a "Twonky System" that actually operated and did so for its intended purposes.

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Thus, Google has failed to establish the existence of a "Twonky System" that functioned in a manner to satisfy each and every limitation of the asserted claims.

Google also failed to establish that all of the documents/things upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least four of the "Twonky System" documents/things are dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 615-4, [1], [2], [6], [11]. Consequently, the "Twonky System" as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at least under § 102(a).

Google has also failed to establish that the "Twonky System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that at least five "Twonky System" documents/things were actually published more than a year before this effective filing date, the "Twonky System" as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-3, [1], [2], [6], [9][12], [11].

Google has also failed to establish that the "Twonky System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Twonky System" was reduced to practice in the United States in a physical embodiment that met each and every limitation of each of the asserted claims of the '615 patent, (ii) that the "Twonky System" ever

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[12] Document [9] has an alleged copyright date of "2010." However, without more, a date of 2010 would mean December 31, 2010. *See, e.g., Amkor Tech., Inc. v. Int'l Trade Comm'n*, 692 F.3d 1250, 1258 (Fed. Cir. 2012); *Oka v. Youssefyeh*, 849 F.2d 581, 584 (Fed. Cir. 1988).

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worked for its intended purpose after being reduced to practice in the aforementioned manner, or

(iii) that the "Twonky System" was not abandoned, suppressed, or concealed after being reduced

to practice in such a manner.

Assuming, for the sake of argument, that the "Twonky System" qualifies as prior art,

when the asserted claims of the '615 Patent are properly construed, in light of the specification,

the level of ordinary skill of one in the art, and the state of technology at issue at the time of the

alleged invention, Google's current invalidity contentions fail to demonstrate that the "Twonky

System" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the "Twonky System" anticipates or

renders obvious at least the following limitations of the asserted claims of the '615 Patent:

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
  - at least because Google has failed to establish that the "Twonky System" embodied a "graphical interface to display a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
  - at least because Google has failed to establish that the "Twonky System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that the "Twonky System" embodied "causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device,

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wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]

- o   at least because Google has failed to establish that the "Twonky System" embodied claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - o   at least because Google has failed to establish that the "Twonky System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - o   at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and

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the at least one additional playback device playing back the multimedia content in synchrony]

- o at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- • [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- • [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- • [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the

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particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]

- o   at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- •   [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - o   at least because Google has failed to establish (i) that the "Twonky System" embodied independent claims 13 and 25 and (ii) that the "Twonky System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

5.   Response to Ex. 615-5 ("Airplay System")

Google summarily contends that the "Airplay System" qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 615-5 at 1. Google's contentions are flawed for various reasons.

For instance, Google has failed to establish how and why the amalgamation of documents/things – including a patent filing from 2006 with seven listed inventors, another patent filing from 2008 with another eleven listed inventors, yet another from 2010 with another single listed inventor, an unofficial specification document from 2021, and a speaker made by a third-party – evidence a single system. Thus, Google has failed to establish the existence of an "Airplay System" that functioned in a manner to satisfy each and every limitation of the asserted claims.

Google also failed to establish that all of the documents upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least six of the "Airplay System" documents/things are dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 615-5, [1]-[5], [8][13]. Consequently, the "Airplay System" as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at least under § 102(a).

Google has also failed to establish that the "Airplay System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that at least eight "Airplay System" documents/things were actually published more than a year before this effective filing date, the "Airplay System" as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-5, [1]-[5], [8], [11]-[12].

Google has also failed to establish that the "Airplay System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Airplay System" was reduced to practice in the United States in a physical embodiment that met each and every limitation of each of the asserted claims of the '615 patent, (ii) that the "Airplay System" ever worked for its

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[13] Documents [2] and [5] have an alleged copyright date of "2011." However, without more, a date of 2011 would mean December 31, 2011. *See, e.g.*, *Amkor Tech., Inc. v. Int'l Trade Comm'n*, 692 F.3d 1250, 1258 (Fed. Cir. 2012); *Oka v. Youssefyeh*, 849 F.2d 581, 584 (Fed. Cir. 1988). Google also cites U.S. Patent Pub. No. "2011/295393" (document [11]), which does not appear to exist. Sonos assumes Google meant to cite to "2011/0295393."

intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the "Airplay System" was not abandoned, suppressed, or concealed after being reduced to practice in such a manner. What's more, Google has failed to identify "another inventor" and instead points to documents/things of disparate individuals and different companies.

Assuming, for the sake of argument, that the "Airplay System" qualifies as prior art, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the "Airplay System" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the "Airplay System" anticipates or renders obvious at least the following limitations of the asserted claims of the '615 Patent:

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
    - at least because Google has failed to establish that the "Airplay System" embodied claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
    - at least because Google has failed to establish that the "Airplay System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer

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playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]

- o at least because Google has failed to establish (i) that the "Airplay System" embodied independent claims 13 and 25 and (ii) that the "Airplay System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

  - o at least because Google has failed to establish (i) that the "Airplay System" embodied independent claims 13 and 25 and (ii) that the "Airplay System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]

  - o at least because Google has failed to establish (i) that the "Airplay System" embodied independent claims 13 and 25 and (ii) that the "Airplay System" embodied "detecting a set of inputs to transfer playback from the playback

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device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - at least because Google has failed to establish that the "Airplay System" embodied independent claims 13 and 25.

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - at least because Google has failed to establish that the "Airplay System" embodied independent claims 13 and 25, and failed to establish that the "Airplay System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - at least because Google has failed to establish (i) that the "Airplay System" embodied independent claims 13 and 25 and (ii) that the "Airplay System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

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6.   Response to Ex. 615-6 ("Sonos5 System")

Google summarily contends that the "Sonos5 System" qualifies as prior art to the '615

patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 615-

6 at 1. Google's contentions are flawed for various reasons.

As an initial matter, Google has woefully failed to provide Sonos with adequate notice of

what Google contends even amounts to the supposed "Sonos5 System." Indeed, Sonos is

unaware of an alleged "Sonos5 speaker," and Google has failed to articulate (i) how, if at all,

Spotify was incorporated into this supposed "Sonos5 System" and (ii) what aspect of the Spotify

service Google is even relying on here. As such, Google's contentions regarding the supposed

"Sonos5 System" are vague, ambiguous, and undefined.

Google also failed to establish that all of the documents upon which it relies were

published or known before the invention of the '615 Patent. The '615 Patent was conceived by

July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and

Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least three of the

supposed "Sonos5 System" documents/things are dated after July 15, 2011. *See* Google's

Invalidity Contentions, Ex. 615-6, [7], [8], [13]. Consequently, the supposed "Sonos5 System"

as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at

least under § 102(a).

Google has also failed to establish that the supposed "Sonos5 System" qualifies as prior

art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than

December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of

Interrogatories (No. 1). Because Google has not established that at least seven "Sonos5 System"

documents/things were actually published more than a year before this effective filing date, the

supposed "Sonos5 System" as allegedly demonstrated by these documents fails to qualify as

§ 102(b) prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-6, [2], [7]-

[9], [11]-[13].

Google has also failed to establish that the supposed "Sonos5 System" is prior art under

35 U.S.C. § 102(g). As discussed above, Google has failed to provide Sonos with adequate

notice of what Google contends even amounts to the supposed "Sonos5 System," let alone

establish that (i) the supposed "Sonos5 System" was reduced to practice in the United States in a

physical embodiment that met each and every limitation of each of the asserted claims of the

'615 patent or (ii) the supposed "Sonos5 System" ever worked for its intended purpose after

being reduced to practice in the aforementioned manner. Relatedly, at least because Google

failed to adequately identify what it contends amounts to the supposed "Sonos5 System," Google

has not possibly established that the supposed "Sonos5 System" was not abandoned, suppressed,

or concealed after being reduced to practice in the aforementioned manner. Moreover, Google

has failed to even identify "another inventor."

Assuming, for the sake of argument, that the supposed "Sonos5 System" qualifies as

prior art, when the asserted claims of the '615 Patent are properly construed, in light of the

specification, the level of ordinary skill of one in the art, and the state of technology at issue at

the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that

the supposed "Sonos5 System" either anticipates or renders obvious the asserted claims of the

'615 Patent.

For instance, Google has failed to establish that the supposed "Sonos5 System"

anticipates or renders obvious at least the following limitations of the asserted claims of the'615

Patent:

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- [13.1]/[25.1] [causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device]
    - o   at least because Google has failed to establish that the "Sonos5 System" embodied "causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device."

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
    - o   at least because Google has failed to establish that the "Sonos5 System" embodied a "graphical interface to display a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
    - o   at least because Google has failed to establish that the "Sonos5 System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
    - o   at least because Google has failed to establish that the "Sonos5 System" embodied "after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
    - o   at least because Google has failed to establish that the "Sonos5 System" embodied claims limitations "(a)," "(b)," and "(c)."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that

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includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]

- o at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System" embodied that "modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

  - o at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone" and "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]

  - o at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System"

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embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," and that "transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System" embodied that "causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - at least because Google has failed to establish (i) that the "Sonos5 System" embodied independent claims 13 and 25 and (ii) that the "Sonos5 System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

7.   Response to Ex. 615-7 ("Spotify System")

Google summarily contends that a "Spotify System" that allegedly included "Spotify Connect" qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex. 615-7 at 1. Google's contentions are flawed for various reasons.

As a threshold manner, Google failed to establish that an alleged "Spotify System" that incorporated "Spotify Connect" existed and embodied the technology described in the "Spotify System" documents/things at a time and place that would qualify such a system as prior art to the '615 Patent. Simply put, Google has proffered no evidence of the existence of such a system prior to December 2011, much less prior to July 2011. In this regard, Google's "Spotify System" that allegedly incorporates "Spotify Connect" comprises documents/things for several different systems from different entities, including "Pinell," "Spotify," "ONKYO," "Denon," and "Logitech." However, "Pinell," "ONKYO," and "Denon" did not incorporate "Spotify Connect" in their respective systems until after September 2013 when Spotify first announced "Spotify Connect." *See, e.g.*, SONOS-SVG2-00059375 at 375 (September 3, 2013 announcement from Spotify, stating that "Spotify Connect will be available on … Denon"); SONOS-SVG2-00059373 at 373 (September 9, 2013 announcement from Frontier Silicon, stating that "Frontier Silicon launches Spotify Connect on Venice 6.5 connected audio module" and "Customers supplied by Frontier Silicon include … Pinell"); SONOS-SVG2-00059367 at 367 at (November 6, 2014 article announcing that "Onkyo has released a firmware update that adds Spotify Connect to its network-enabled 2014 AV receivers and home theater packages."); SONOS-SVG2-00059352 at 352 (providing December 27, 2014 firmware update for "Onkyo TX-NR515 Network A/V Receiver " that "[a]dds support of Spotify Connect"); SONOS-SVG2-00059353 at

353 (Onkyo adding support for "Spotify Connect" on "18 December 2014" for "TX-NR515 / TX-NR515AE / HT-R791"). Moreover, Google has failed to establish that Logitech ever incorporated "Spotify Connect" into a "Squeezebox" system, much less at a time and place that would qualify the system as prior art to the '615 Patent. Contrary to Google's contention, "Squeezebox" users have commented that "[t]he Squeezebox is not a Spotify Connect system." SONOS-SVG2-00059350 at 350; *see also, e.g.,* SONOS-SVG2-000593382 at 382-383. Accordingly, Google's "Spotify System" contentions are fatally flawed.

Google has also failed to establish that all of the documents upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least six of the "Spotify System" documents/things are dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 615-7, [1][14], [3]-[5], [11]-[12]. Consequently, the "Spotify System" as allegedly demonstrated by these documents is disqualified as prior art to the '615 Patent at least under § 102(a).

Further, Google has failed to establish that the "Spotify System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that at least ten "Spotify System" documents/things were actually published more than a year before this effective filing date, the "Spotify System"

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[14] While Google alleges that document [1] has a copyright date of "2009," the metadata of document [1] indicates a "2015" creation and modified date.

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as allegedly demonstrated by these documents fails to qualify as § 102(b) prior art to the '615

Patent. *See* Google's Invalidity Contentions, Ex. 615-7, [1], [3]-[8], [11]-[13].

Google has also failed to establish that the "Spotify System" is prior art under 35 U.S.C.

§ 102(g). Indeed, Google has failed to establish either (i) that the "Spotify System" was reduced

to practice in the United States in a physical embodiment that met each and every limitation of

each of the asserted claims of the '615 patent, (ii) that the "Spotify System" ever worked for its

intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the

"Spotify System" was not abandoned, suppressed, or concealed after being reduced to practice in

such a manner. Moreover, Google has failed to even identify "another inventor."

Because Google failed to establish that a "Spotify System" incorporating "Spotify

Connect" existed at a time and place that would qualify it as a prior art against the '615 Patent,

Google's contentions regarding the alleged "Spotify System" are irrelevant. Nevertheless, when

the asserted claims of the '615 Patent are properly construed, in light of the specification, the

level of ordinary skill of one in the art, and the state of technology at issue at the time of the

alleged invention, Google's current invalidity contentions fail to demonstrate that the "Spotify

System" either anticipates or renders obvious at least the following limitations of the asserted

claims of the '615 Patent:

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
    - at least because Google has failed to establish that the "Spotify System" embodied a "graphical interface to display a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]

○ at least because Google has failed to establish that the "Spotify System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  ○ at least because Google has failed to establish that the "Spotify System" embodied "causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  ○ at least because Google has failed to establish that the "Spotify System" embodied claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  ○ at least because Google has failed to establish that the "Spotify System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]

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- o   at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 13 and 25 and (ii) that the "Spotify System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]
  - o   at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 13 and 25 and (ii) that the "Spotify System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o   at least because Google has failed to establish that the "Spotify System" embodied independent claims 13 and 25, and failed to establish that the "Spotify System" embodied "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical

interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]

- o at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 13 and 25 and (ii) that the "Spotify System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]

  - o at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 13 and 25 and (ii) that the "Spotify System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]

  - o at least because Google has failed to establish (i) that the "Spotify System" embodied independent claims 13 and 25 and (ii) that the "Spotify System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

8. Response to Ex. 615-8 ("Squeezebox System")

Google summarily contends that the "Squeezebox System" qualifies as prior art to the

'615 patent under pre-AIA 35 U.S.C. § 102(a), (b), and (g). Google's Invalidity Contentions, Ex.

615-8 at 1. Google's contentions are flawed for various reasons.

Google failed to establish that all of the documents upon which it relies were published or known before the invention of the '615 Patent. The '615 Patent was conceived by July 15, 2011 and reduced to practice by December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). In contrast, at least one of the "Squeezebox System" documents/things is dated after July 15, 2011. *See* Google's Invalidity Contentions, Ex. 615-8, [1]. Consequently, the "Squeezebox System" as allegedly demonstrated by this document is disqualified as prior art to the '615 Patent at least under § 102(a).

Further, Google has failed to establish that the "Squeezebox System" qualifies as prior art under 35 U.S.C. § 102(b). The '615 Patent has an effective filing date no later than December 30, 2011. *See* Sonos's Responses and Objections to Respondents' First Set of Interrogatories (No. 1). Because Google has not established that at least five "Squeezebox System" documents/things were actually published more than a year before this effective filing date, the "Squeezebox System" as allegedly demonstrated by these documents fail to qualify as § 102(b) prior art to the '615 Patent. *See* Google's Invalidity Contentions, Ex. 615-8, [1], [12]-[15].

Google has also failed to establish that the "Squeezebox System" is prior art under 35 U.S.C. § 102(g). Indeed, Google has failed to establish either (i) that the "Squeezebox System" was reduced to practice in the United States in a physical embodiment that met each and every limitation of each of the asserted claims of the '615 patent, (ii) that the "Squeezebox System" ever worked for its intended purpose after being reduced to practice in the aforementioned manner, or (iii) that the "Squeezebox System" was not abandoned, suppressed, or concealed after being reduced to practice in such a manner. Moreover, Google has failed to even identify "another inventor."

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Assuming, for the sake of argument, that the "Squeezebox System" qualifies as prior art,

when the asserted claims of the '615 Patent are properly construed, in light of the specification,

the level of ordinary skill of one in the art, and the state of technology at issue at the time of the

alleged invention, Google's current invalidity contentions fail to demonstrate that the

"Squeezebox System" either anticipates or renders obvious the asserted claims of the '615

Patent.

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
  - at least because Google has failed to provide Sonos with adequate notice of what Google even contends amounts to the claimed "control device," and Google has failed to establish that the "Squeezebox System" embodied "a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that the "Squeezebox System" embodied "after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]

- o at least because Google has failed to establish that the "Squeezebox System" embodied claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - o at least because Google has failed to establish that the "Squeezebox System" embodied "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control

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device to a particular zone group of a media particular playback system that includes a first zone and a second zone," and "wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony"

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the

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particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
    - o at least because Google has failed to establish (i) that the "Squeezebox System" embodied independent claims 13 and 25 and (ii) that the "Squeezebox System" embodied that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

9.   Response to Ex. 615-9 ("Weel")

Google summarily contends that U.S. Patent Publication No. 2005/0251566 ("Weel") qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 102(a) and (b). Google's Invalidity Contentions, Ex. 615-9 at 1. However, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that Weel either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that Weel anticipates or renders obvious at least the following limitations of the asserted claims of the '615 Patent:

- [13.1]/[25.1] [causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device]
    - o at least because Google has failed to establish that Weel teaches or suggests "one or more transport controls to control playback by the control device."

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]

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○ at least because Google has failed to establish that Weel teaches or suggests "a selectable option for transferring playback from the control device."

• [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]

○ at least because Google has failed to establish that Weel teaches or suggests "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

• [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]

○ at least because Google has failed to establish that Weel teaches or suggests limitation [13.4]/[25.8].

• [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]

○ at least because Google has failed to establish that Weel teaches or suggests claim limitations "(a)," "(b)," and "(c)."

• [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]

○ at least because Google has failed to establish that Weel teaches or suggests "causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

• [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that

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includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]

  o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

  o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]

  o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be

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stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - o at least because Google has failed to establish (i) that Weel teaches or suggests independent claims 13 and 25 and (ii) that Weel teaches or suggests that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

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10.   Response to Ex. 615-10 ("Qureshey")

Google summarily contends that U.S. Patent No. 8,050,652 ("Qureshey") qualifies as

prior art to the '615 Patent under pre-AIA 35 U.S.C. § 102(a) and (e). Google's Invalidity

Contentions, Ex. 615-10 at 1. However, when the asserted claims of the '615 Patent are properly

construed, in light of the specification, the level of ordinary skill of one in the art, and the state of

technology at issue at the time of the alleged invention, Google's current invalidity contentions

fail to demonstrate that Qureshey either anticipates or renders obvious the asserted claims of the

'615 Patent.

For instance, Google has failed to establish that Qureshey anticipates or renders obvious

at least the following limitations of the asserted claims of the '615 Patent:

- [13.1]/[25.1] [causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device]
  - at least because Google has failed to even articulate what it contends in Qureshey amounts to the "control device"

- [13.2]/[25.6] [after connecting to a local area network via a network interface, identifying playback devices connected to the local area network]
  - at least because Google has failed to establish that Qureshey teaches or suggests "identifying playback devices connected to the local area network."

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
  - at least because Google has failed to establish that Qureshey teaches or suggests "a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
  - at least because Google has failed to establish that Qureshey teaches or suggests "(i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that Qureshey teaches or suggests "after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - at least because Google has failed to establish that Qureshey teaches or suggests claim limitations "(a)," "(b)," and "(c)."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests "a stereo pair."

- [15]/[26] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved

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multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

- o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o   at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the

particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]

- o at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests "wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - o at least because Google has failed to establish (i) that Qureshey teaches or suggests independent claims 13 and 25 and (ii) that Qureshey teaches or suggests that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

11.   Response to Ex. 615-11 ("Jannink" and "Al-Shaykh")

Google summarily contends that U.S. Patent Publication No. 2008/0120501 ("Jannink") and U.S. Patent Publication No. 2011/0131520 ("Al-Shaykh") qualifies as prior art to the '615 patent under pre-AIA 35 U.S.C. § 103. Google's Invalidity Contentions, Ex. 615-11 at 1. However, Google failed to articulate any specific reason as to why a person of ordinary skill in the art would have been motivated to combine Jannink and Al-Shaykh, much less in the specific manner to achieve the asserted claims. *See id.* Google has also failed to provide Sonos with adequate notice of how Google is proposing that the teachings of Jannink and Al-Shaykh would have been combined and what in this purported combination Google contends amounts to the claimed "control device," "one or more first cloud servers," and "one or more second cloud servers," among other deficiencies.

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Further, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that the combination of Jannink and Al-Shaykh anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that the combination of Jannink and Al-Shaykh anticipates or renders obvious at least the following limitations of the asserted claims of the'615 Patent:

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - at least because Google has failed to establish that the combination of Jannink and Al-Shaykh teaches or suggests "causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

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- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
    - at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]
    - at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing

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playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]

- o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - o   at least because Google has failed to establish (i) that the combination of Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Jannink and Al-Shaykh teaches or suggests "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]

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o   at least because Google has failed to establish (i) that the combination of
Jannink and Al-Shaykh teaches or suggests independent claims 13 and 25 and
(ii) that the combination of Jannink and Al-Shaykh teaches or suggests that
"causing one or more first cloud servers to add the multimedia content to the
local playback queue on the particular playback device comprises sending a
message to the streaming content service that causes the one or more first
cloud servers to add the multimedia content to the local playback queue on the
particular playback device."

12.   Response to Ex. 615-12 ("Volk" and "Al-Shaykh")

Google summarily contends that U.S. Patent No. 7,720,686 ("Volk") and U.S. Patent

Publication No. 2011/0131520 ("Al-Shaykh") qualifies as prior art to the '615 patent under pre-

AIA 35 U.S.C. § 103. Google's Invalidity Contentions, Ex. 615-11 at 1. However, Google

failed to articulate any specific reason as to why a person of ordinary skill in the art would have

been motivated to combine Volk and Al-Shaykh, much less in the specific manner to achieve the

asserted claims. *See id.* Google has also failed to provide Sonos with adequate notice of how

Google is proposing that the teachings of Jannink and Al-Shaykh would have been combined and

what in this purported combination Google contends amounts to the claimed "control device,"

"one or more first cloud servers," and "one or more second cloud servers," among other

deficiencies.

Further, when the asserted claims of the '615 Patent are properly construed, in light of the

specification, the level of ordinary skill of one in the art, and the state of technology at issue at

the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that

the combination of Volk and Al-Shaykh anticipates or renders obvious the asserted claims of the

'615 Patent.

For instance, Google has failed to establish that the combination of Volk and Al-Shaykh

anticipates or renders obvious at least the following limitations of the asserted claims of the '615

Patent:

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- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]
  - at least because Google has failed to establish that the combination of Volk and Al-Shaykh teaches or suggests "causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]
    - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
    - at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical

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interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
- o at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - o at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service," and "wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - o at least because Google has failed to establish (i) that the combination of Volk and Al-Shaykh teaches or suggests independent claims 13 and 25 and (ii) that the combination of Volk and Al-Shaykh teaches or suggests that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

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13.   Response to Ex. 615-13 ("DLNA")

Google summarily contends that "DLNA" qualifies as prior art to the '615 Patent under pre-AIA 35 U.S.C. § 102(a) and (b). Google's Invalidity Contentions, Ex. 615 -13 at 1. Google's contentions are flawed for various reasons.

For instance, what Google refers to as "DLNA" is actually a collection of "[g]uidelines" that include "two volumes covering [a]rchitecture and [p]rotocols and [m]edia [f]ormats," to provide "vendors with the information needed to build interoperable networked platforms and devices for the digital home." DLNA at Introduction. In this regard, "DLNA" is a collection of guidelines that incorporate several standards, including Universal Plug and Play ("UPnP") for media management and device discovery and control, which in of itself includes at least 18 different documents that were created by various authors at various different times over the course of more than 10 years. For at least these reasons, Google has failed to establish that this collection of "DLNA" materials forms a single reference that can anticipate the asserted claims under 35 U.S.C. § 102.

Assuming, for the sake of argument, that "DLNA" is a single reference, when the asserted claims of the '615 Patent are properly construed, in light of the specification, the level of ordinary skill of one in the art, and the state of technology at issue at the time of the alleged invention, Google's current invalidity contentions fail to demonstrate that "DLNA" either anticipates or renders obvious the asserted claims of the '615 Patent.

For instance, Google has failed to establish that "DLNA" anticipates or renders obvious at least the following limitations of the asserted claims of '615 Patent:

- [13.1]/[25.1] [causing a graphical interface to display a control interface including one or more transport controls to control playback by the control device]
  - at least because Google has failed to even articulate what it contends in "DLNA" amounts to the "control device"

- [13.2]/[25.6] [after connecting to a local area network via a network interface, identifying playback devices connected to the local area network]
  - at least because Google has failed to even articulate what it contends in "DLNA" amounts to the "control device" or the "playback devices"

- [13.3]/[25.7] [causing the graphical interface to display a selectable option for transferring playback from the control device]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "causing the graphical interface to display a selectable option for transferring playback from the control device."

- [13.4]/[25.8] [detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network."

- [13.5]/[25.9] [after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device]
  - at least because Google has failed to establish that "DLNA" teaches or suggests "after detecting the set of inputs to transfer playback from the control device to the particular playback device, causing playback to be transferred from the control device to the particular playback device."

- [13.6]/[25.10] [wherein transferring playback from the control device to the particular playback device comprises (a) causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service; (b) causing playback at the control device to be stopped; and (c) modifying the one or more transport controls of the control interface to control playback by the playback device]
  - at least because Google has failed to establish that "DLNA" teaches or suggests claim limitations "(a)," "(b)," and "(c)."

- [13.7]/[25.11] [causing the particular playback device to play back the multimedia content, wherein the particular playback device playing back the multimedia content

comprises the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content.]

- o   at least because Google has failed to establish that "DLNA" teaches or suggests "the particular playback device retrieving the multimedia content from one or more second cloud servers of a streaming content service and playing back the retrieved multimedia content."

- [14.1-14.3] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone of a media playback system that includes the particular playback device as a first channel of a stereo pair and an additional playback device as a second channel of the stereo pair, wherein modifying the one or more transport controls of the control interface to control playback by the particular playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the additional playback device, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the additional playback device playing back the multimedia content as the stereo pair]
  - o   at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests "a stereo pair."

- [15.1-15.3]/[26.1-26.4] [wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone, wherein the first zone includes the particular playback device and the second zone includes at least one additional playback device, wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony, and wherein the particular playback device playing back the retrieved multimedia content comprises the particular playback device and the at least one additional playback device playing back the multimedia content in synchrony]

    at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests "wherein detecting the set of inputs to transfer playback from the control device to the particular playback device comprises detecting a set of inputs to transfer playback from the control device to a particular zone group of a media particular playback system that includes a first zone and a second zone," "causing the one or more transport controls of the control interface to control playback by the particular playback device and the at least one additional playback device in synchrony," and "the particular playback device

and the at least one additional playback device playing back the multimedia content in synchrony."

- [18.1-18.3] [wherein the method further comprises detecting a set of inputs to transfer playback from the playback device back to the control device, wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device]
  - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests "detecting a set of inputs to transfer playback from the playback device back to the control device," "causing playback at the playback device to be stopped," and "modifying the one or more transport controls of the control interface to control playback by the control device."

- [19.1-19.2] [wherein causing the graphical interface to display the control interface including one or more transport controls to control playback by the control device comprises causing the graphical interface to display a control interface that includes the one or more transport controls in a particular arrangement on the graphical interface, and wherein modifying the one or more transport controls of the control interface to control playback by the playback device comprises causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement]
  - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests "causing the graphical interface to display the one or more transport controls to control playback by the playback device in the particular arrangement."

- [20.1-20.3] [wherein causing the one or more first cloud servers to add multimedia content to the local playback queue on the particular playback device comprises causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service]
  - at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service."

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- [21.1] [wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device]
  - o at least because Google has failed to establish (i) that "DLNA" teaches or suggests independent claims 13 and 25 and (ii) that "DLNA" teaches or suggests that "causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device."

IV.   Response to Google's Contentions Regarding Obviousness

On pages 68 through 83 of Google's Invalidity Contentions Cover Pleading, Google purports to provide its contentions concerning "motivations and reasons to combine." However, what follows is nothing of the sort, indeed falling well short of Google's burden under PLR 3-3(b) to provide "an explanation of why the prior art renders the asserted claim obvious, including an identification of any combinations of prior art showing obviousness." Here, Google merely articulates several categories of technology (e.g., "remote control of speaker group") and then attempts to provide reasons why it would have been obvious to incorporate each category of technology into some set of undefined "one or more references." Of course, this is not how the obviousness analysis works. Merely alleging that some broad category of technology would have been obvious to incorporate into an undefined set of one or more references fails to at least:

- identify any specific combination of prior art,

- identify any specific motivation as to why a POSITAPOSA would have combined features allegedly taught from one reference with features allegedly taught from another reference,

- explain why a combination of features or modification of a reference would have resulted in a specific claim element, or

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- identify why a POSITAPOSA would have had a reasonable expectation of success for making the proposed combination or modification,

all of which is required to set forth even a *prima facie* case of obviousness. *See, e.g., Verinata Health, Inc. v. Sequenom, Inc.*, Case No. 12-CV-865, 2014 WL 4100638, at *5 (N.D. Cal. Aug. 20, 2014); *Network Appliance Inc. v. Sun Microsystems Inc.*, No. C-07-05488 EDL, 2009 WL 2761924, at *8 (N.D. Cal. Aug. 31, 2009) ("Merely listing the reference as a supporting reference is not equivalent to providing an invalidity claim chart for that reference, as required by Patent LR 3–3(c)."); *Largan Precision Co, Ltd. v. Genius Elec. Optical Co.*, Case No. 13-CV-2502, 2014 WL 6882275, at *4 (N.D. Cal. Dec. 5, 2014) (striking expert opinion because defendant "fails to satisfy Patent Local Rule 3-3(c)'s requirement that the invalidity contentions include '[a] chart identifying where specifically in each alleged item of prior art each limitation of each asserted claim is found....'"); *Life Techs. Corp. v. Biosearch Techs., Inc.*, Case No. 12-CV-852, 2012 WL 4097740, at *3 (N.D. Cal. Sept. 17, 2012) (striking expert opinion regarding a particular prior art because the particular prior art was "not specifically identified as invalidating a particular claim in defendants' invalidity chart," which is improper under Patent L.R. 3–3(c).); *see also, e.g., Elbit Sys. Land & C4I Ltd. v. Hughes Network Sys., LLC*, Case No. 15-CV-37, 2017 WL 11658860, at *1 (E.D. Tex. July 25, 2017) (precluding defendant from "relying on uncharted prior art to prove invalidity by demonstrating that uncharted prior art discloses or suggests elements of the asserted claims.").

Worse, the technology categories that Google relies on here are not the specific claim elements recited in the asserted claims – nor has Google even alleged that they are. Thus, whether or not it would have been obvious to add a given technology category into "one or more references" – as Google appears to allege – is not relevant to the ultimate question of, and does

not suffice to establish, whether a given asserted claim would have been obvious, or whether it

would have been obvious to arrive at a given combination of claim elements in view of specific

teachings of specific references.

A.   '966 and '885 Patents

1.   State of the Art

Google alleges that the '966 and '885 Patents "admit[] that manual speaker grouping,

controlled remotely, [was] available and ubiquitous at the time of the invention. The state of the

art included multi-zone audio systems that could play different sets of media across zones or

groups of speakers." Sonos disagrees.

The '966 and '885 Patents recognized that users demand not only quality audio

reproduction but also a system that allows multiple audio devices to access music from different

sources. '885 Patent at 1:35-45. Before Sonos, a conventional multi-zone audio system might

include a number of audio sources, but each audio source had to be connected to its own

amplifier and a set of speakers and was typically installed in one place. *Id*. at 1:46-50.

According to the '966 and '885 Patents, this had inherent limitations:

> In order to play an audio source at one location, the audio source must be provided
> locally or from a centralized location. When the audio source is provided locally,
> the multi-zone audio system functions as a collection of many stereo systems,
> making source sharing difficult. When the audio source is provided centrally, the
> centralized location may include a juke box, many compact discs, an AM or FM
> radio, tapes, or others. To send an audio source to an audio player demanding such
> source, a cross-bar type of device is used to prevent the audio source from going to
> other audio players that may be playing other audio sources.

Id. at 1:50-61. Moreover, as the '966 and '885 Patents recognized, "[i]n order to achieve playing

different audio sources in different audio players, the traditional multi-zone audio system is

generally either hard-wired or controlled by a pre-configured and pre-programmed controller."

Id. at 1:62-65. Such a system created problems:

While the pre-programmed configuration may be satisfactory in one situation, it may not be suitable for another situation. For example, a person would like to listen to broadcast news from his/her favorite radio station in a bedroom, a bathroom and a den while preparing to go to work in the morning. The same person may wish to listen in the den and the living room to music from a compact disc in the evening. In order to satisfy such requirements, two groups of audio players must be established. In the morning, the audio players in the bedroom, the bathroom and the den need to be grouped for the broadcast news. In the evening, the audio players in the den and the living room are grouped for the music. Over the weekend, the audio players in the den, the living room, and a kitchen are grouped for party music. Because the morning group, the evening group and the weekend group contain the den, it can be difficult for the traditional system to accommodate the requirement of dynamically managing the ad hoc creation and deletion of groups.

Id. at 1:65-2:17.

Thus, the '966 and '885 Patents recognized both "a need for dynamic control of the audio players as a group" and a system in which "the audio players may be readily grouped." *Id*. at 2:18-20. The inventions of the '966 and '885 Patents would, thus, overcome the problems "in a traditional multi-zone audio system [where] the audio players have to be adjusted one at a time, resulting in an inconvenient and non-homogenous audio environment." *Id*. at 2:20-23.

The '966 and '885 Patents provided an unconventional solution to this technological problem. "In general, the present invention pertains to controlling a plurality of multimedia players, or simply players, in groups." *Id*. at 2:36-37. One specific aspect of the grouping technology that is taught by the'966 and '885 Patents involves a controller with a user interface that permits a user to configure and save a "zone scene," which may comprise a "predefined" grouping of zone players that can later be "invoked" in order to group the zone players in the "zone scene" together for synchronous playback.   *Id*. at 2:38-61, 3:1-3:13, 8:42-11:12. The '966 and '885 Patents explain that this "zone scene" technology for grouping zone players together for synchronous playback provides improvements over the existing technology for grouping zone players together for synchronous playback, which involved defining the group membership at the

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time that the group was to be invoked – particularly in situations where a larger number of zone players are to be grouped together for synchronous playback. *Id*. at 8:42-9:15. For instance, the benefits highlighted by the '966 and '885 Patents include (i) allowing a group of zone players to be "predefined" as part of a "zone scene" so that the group's membership need not be defined at the time that the group is to be invoked, (ii) allowing a predefined group to be invoked without requiring the zone players in the group to be separated from other groups beforehand, and (iii) allowing zone players to exist as part of multiple different predefined groups that can be invoked in order to dynamically group the zone players for synchronous playback. *Id*. at 8:42-11:12.

In line with these teachings, the '966 Patent claims technology for managing and using "zone scenes" to facilitate grouping of zone players, which provides an unconventional solution to the technological problems related to grouping zone players that are described in the '966 Patent. *See, e.g.,* '966 Patent at cl. 1. Similarly, the '885 Patent claims technology for managing and operating in accordance with different "zone scenes," which provides an unconventional solution to the technological problems related to grouping zone players that are described in the '885 Patent. *See, e.g.,* '885 Patent at cl. 1.

Google alleges that "[t]here was no need for dynamic control of audio players as a group because this too was well known in the art," and then cites the DAB1 system and the Crestron system. However, as explained above, Google has failed to establish that these systems were even prior art – let alone that these systems teach any claim element of any asserted patent.

2.   Speaker Grouping

Google alleges that it would have been "obvious to combine" the references cited in Rider A with "the cited references" because "adding speaker grouping to an ungrouped set of speakers would combine known elements methods (combining separate elements for efficiency

and ease of use) with speakers to yield the predictable result of increasing the efficiency and ease of use of a speaker system." Google has not established that this would have been obvious.

For each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider A, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider A expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller."); U.S. Patent No. 7,234,115 at 2:29-3:31 (Google's "Home Director System" reference expressly teaching away from Google's "Crestron System," among other types of systems). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider A in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, "speaker grouping" was not a well-known element or method at the time of the invention, and adding "speaker grouping" into a system that does not have "speaker grouping" would not have increased efficiency or ease of use. Moreover, Sonos disagrees that any claim

elements include "duplicative elements." Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider A with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

3.   Storing Group Information at a Speaker

Google alleges that "adding this concept to a speaker system would have yielded the predictable result of storing group information at a speaker. Sonos disagrees.

For each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider B, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider B expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller."); Bose Freespace at 24 (disclosing hard-wired "speaker connections"); Cucos at 3:38-3:41 ("Using the present invention, much of the real-time computing requirements for a plurality of client devices can be shifted to a single, more powerful server device."). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

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Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider B in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, it was not well known to store system information at devices remote from the controller, particularly in the context of a system for creating predefined groups of playback devices that are to be configured for synchronous playback of audio when the predefined group is invoked. Sonos disagrees that "information can only be stored in two locations – the controller or the speaker device. In many references, the speaker and the controller were not capable of storing such information. In some cases, information could have been stored elsewhere, including on a centralized device such as a receiver, hub, or home computer or networked storage system.   Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider B with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

4.   Remote Control of Speaker Group

Google alleges that "remote control of a speaker group is merely combining known prior art elements (remote controls and speakers) to yield the predictable result of a remote controlled speaker system." Sonos disagrees.

For each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that

charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider C, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider C expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller."); Bose Freespace at 24 (disclosing hard-wired "speaker connections"); U.S. Patent No. 7,234,115 at 2:29-3:31 (Google's "Home Director System" reference expressly teaching away from Google's "Crestron System," among other types of systems). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider C in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, remote control of a speaker group involved sophisticated technological challenges. These are not known prior art elements and would not have yielded a predictable result, particularly in the context of a system for creating predefined groups of playback devices that are to be configured for synchronous playback of audio when the predefined group is invoked. Thus, Sonos disagrees that it would have been obvious to combine the references cited

in Rider C with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

5.   Dynamic Modification of Speaker Groups

Google does not explain what it means by "dynamic modification of speaker groups." Google alleges that "a predictable result in the wired and wireless context is that less manual labor may be needed to wire or unwire devices," but Google does not explain what this would have been the result of, why less manual labor is relevant, or what it means or what is entailed in "wir[ing] or unwir[ing] devices." Google alleges that it "would have been obvious to try wireless or dynamic control of a speaker group because there are two options for speaker control—wired or wireless." Sonos disagrees.

For each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider D, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider D expressly teach away from combining with another reference identified by GoogleU.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller," such as the "Bose Lifestyle"

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system).   In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider D in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, Sonos disagrees that the fact that control of anything can be carried out wired or wirelessly renders anything obvious or that this suggests that dynamic control of a speaker group would be obvious to try or implement, particularly in the context of a system for creating predefined groups of playback devices that are to be configured for synchronous playback of audio when the predefined group is invoked. Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider D with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

6.   Creating or Using "Scene" Information

Google alleges that "scene information was well known in the art and would have been obvious to combine with speaker systems, as shown by the prior art references cited herein." As elsewhere, Google cites no specific teachings here and provides no narrative explanation as to how any specific teaching amounts to "scene information" or why it would have been obvious to combine "scene information" with any other system. Google does even explain what it means by "scene information."

Moreover, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider E, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider E expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller."); U.S. Patent No. 7,234,115 at 2:29-3:31 (Google's "Home Director System" reference expressly teaching away from Google's "Crestron System," among other types of systems). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider E in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider E with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

7.   Graphical User Interface

Sonos disagrees that utilizing a graphical user interface in the context of speaker grouping would have yielded predictable results.

As an initial matter, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider F, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider F expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller."); U.S. Patent No. 7,234,115 at 2:29-3:31 (Google's "Home Director System" reference expressly teaching away from Google's "Crestron System," among other types of systems). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider F in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, graphical user interfaces were not simple substitutions for conventional buttons and knobs. It would not have been obvious to substitute a graphical user interface into a system

without one, as doing so would have involved sophisticated technical challenges and not merely design choices. Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider F with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

8.   Naming a Group

Sonos disagrees that identifying a group with a name in the context of speaker grouping was a combination of known prior art elements according to known methods that yielded predictable results.

As an initial matter, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider G, at least some of which disclose completely different architectures, different protocols, and different types of devices. *E.g., compare* "Sonos Digital Music System" *with* "Crestron Adagio." In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider G in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider G with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

9.   Overlapping or Non-Overlapping Groups

Sonos disagrees that it was well known in the art to group devices together and that those groups may be overlapping or non-overlapping, particularly in the context of a system for creating predefined groups of playback devices that are to be configured for synchronous playback of audio when the predefined group is invoked. It would not have been obvious to try and implement either overlapping or non-overlapping groups.

As an initial matter, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider G, at least some of which disclose completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider G expressly teach away from combining with another reference identified by Google. *See, e.g.,* U.S. Patent No. 7,571,014 at 1:34-2:14 (teaching away from "conventional" or "traditional multi-zone audio system(s)" that are "either hard-wired or controlled by a pre-configured and pre-programmed controller," such as the "Bose Lifestyle" system). In this regard, a POSITA would have actually been discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider G in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Further, Google does not cite anything to establish that a POSITA would have even known that overlapping groups would have been possible. Indeed, the "Sonos Forums" cast doubt as to how overlapping groups would have worked in a Sonos system. *See, e.g.,* GOOG-SONOS-WDTX-INV-00015870 at 871 ("Now this brings an interesting question: should zones be allowed to be in more than one group? If this is allowed, are there any unwanted side-effects with this?"). Thus, inventing this feature was not the result of simply selecting a feature from a finite set of known features. Sonos thus disagrees that it would have been obvious to combine the references cited in Rider H with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

10. Digital Data Networks

Google alleges that applying the teachings of "using digital networks to transmit digital data packets" to "speaker groups" would have been obvious. Sonos disagrees.

As an initial matter, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more

references cited in Rider L. Indeed, conventional wisdom taught away from modifying a speaker to communicate on a digital data network because doing so would have involved a host of sophisticated technical challenges with no foreseeable benefit. Passive hard-wired speakers were sufficient and preferable at the time due to convenience, ease of use, and reliability.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider L in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider L with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

11.   Sonos-Related Prior Art

Google alleges that "it would have been obvious to combine any one of the Sonos related prior art with one another to arrive at the limitation because they all describe related and interoperable systems." However, Google cites no evidence that these alleged "prior art" references describe "related and interoperable systems," other than being developed and authored by employees of the same company. This is not sufficient to substitute for the traditional obviousness analysis. Indeed, the mere fact that two patents or patent publications name a common inventor or name employees at the same company would not have suggested or even provided a sufficient motivation to a POSITA to combine features from these patents or patent

publications. Google also cites to the Sonos Forums and alleges that this is directed at

improvements specifically for the Sonos prior art products, such as those disclosed in Sonos

System, Lambourne, and Millington, such that a POSITA would have been motivated to

combine the teaching of the Sonos Forums with these other Sonos references. Again, merely

being related or published by a common company does not provide a motivation to a POSITA to

combine teachings from disparate references. Thus, Sonos disagrees that it would have been

obvious to combine teachings from any "Sonos" references identified in Google's Sections IV-

VI or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence

or explanation, Sonos reserves the right to respond.

B.   '033 and '615 Patents

1.   State of the Art

Google alleges that the '033 and '615 Patents "admit[] that technology used to access and

playback online audio and video content was available and ubiquitous at the time of the

invention. The state of the art included wired or wireless networks connecting multiple playback

devices within a home, to share multimedia content among devices or groups of devices."

Google's Invalidity Contentions at 77. Sonos disagrees.

The '033 and '615 Patents recognized that "[t]echnological advancements have increased

the accessibility of music content, as well as other types of media…." '615 Patent at 1:19-20.

This allowed users to access audio and video content over the Internet. *Id.* at 1:21-26. But, the

'033 and '615 Patents identified a particular problem and provided an unconventional

technological solution. Specifically, the '033 and '615 Patents recognized that "[w]ired or

wireless networks can be used to connect one or more multimedia playback devices for a home

or other location playback network (e.g., a home music system)."at 1:66-2:2. This allowed for a user to interact with a dedicated "controller" device for the system to cause "[m]usic and/or other multimedia content [to] be shared among devices and/or groups of devices … associated with a playback network." *Id.* at 2:6-9, 4:53-62. However, the '033 and '615 Patents recognized the need for technology that would enable a "third party application" to "pass music to [a] household playback system without [a] tight coupling to that household playback system." *Id.* at 12:63-67. To that end, the '033 and '615 Patents are directed to technology that "facilitate[s] streaming or otherwise providing music from a music-playing application Sonos) system." *Id.* at 2:10-14.

The '033 and '615 Patents provide an unconventional technological solution to this problem. For example, the '033 and '615 Patents describe an "Example Controller" that "can be used to facilitate the control of multi-media applications…." '615 Patent at 9:8-14. "In particular, the controller 500 is configured to facilitate a selection of a plurality of audio sources available on the network and enable control of one or more zone players … through a wireless network interface 508." *Id.* at 9:14-18. Further, the '033 and '615 Patents describe embodiments that "enable a user to stream music from a music-playing application (e.g., browser-based application, native music player, other multimedia application and so on) to a local multimedia content playback (e.g., Sonos) system." *Id.* at 12:8-12. More specifically, the '033 and '615 Patents teach that while "a user listens to a third party music application (e.g., Pandora™ Rhapsody™, Spotify™, and so on)" on a user device, such as the user's "smart phone," the user can "select[] an option to continue playing [the current] channel on her household music playback system (e.g., SonosTM)," which will cause the user's "playback system" to "pick[] up from the same spot on the selected channel that was on her phone and output[] that content (e.g.,

that song) on speakers and/or other playback devices connected to the household playback system." *Id.* at 12:44-53; *see also id.* at 13:1-53.

The '033 and '615 Patents go on to teach specific technology for facilitating this transfer of playback responsibility from the user's device to the user's playback system. For instance, the '033 and '615 Patents teach that one aspect of this technology involves causing data for retrieving network-based media content (such as a uniform resource locator (URL) or other type of resource locator) to be passed to a playback device in the playback system so that the playback device can "run on its own to fetch the content" from a networked audio source, such as a "cloud" server that is accessible over the Internet. *Id.* at 12:53-63; *see also id.* at 12:63-67 (describing that "[a] third party application can open or utilize an application programming interface (API) to pass music to the household playback system without tight coupling to that household playback system"); 15:47-16:19 (describing a "throw it over the wall" approach in which "a third party application provides a multimedia playback device (*e.g.*, an audio track) so that . . . the local playback system (*e.g.*, SonosNet™) can directly access a source of the content and . . . play the content directly off the network (*e.g.*, the Internet) or cloud," where the "connection between the third-party application and the local playback device (*e.g.*, Sonos ZonePlayer™) can be direct over a local area network (LAN)" or "remote through a proxy server in the cloud"); 16:53-17:4 (describing various embodiments for "queue management" associated with the transfer of playback from a control device to a playback system, including an embodiment where a "shared queue is provided between the local playback system and the third party application to keep the local system and the application synchronized"). Further, the '033 and '615 Patents teach that another aspect of this technology involves transitioning the user's device into a mode in which it functions to control the playback of the media content by the

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user's playback system after the transfer. *Id.* at 16:20-42, 17:5-20. In this way, the technology

taught by the '033 and '615 Patents provide for intuitive and seamless transfer of playback

responsibility from a user's device running a media-playing application to a media playback

system despite not requiring a "tight coupling" between that media-playing application and the

media playback system.

In line with these teachings, the '033 and '615 claim technology for facilitating transfer

of playback responsibility from a user's device to a media playback system. *See, e.g.,* '615

Patent at cl. 13; '033 at cl. 1.

Google alleges that "[t]here was no need for media access from the cloud or media

transfer between devices because this too was well known in the art," and then punts to its

exhibit Riders. Google's Invalidity Contentions at 78. However, as explained above, Google

has failed to establish that each of these references were even prior art – let alone that these each

of these references teach any claim element of any asserted patent.

2.   Playback to Multiple Devices

Google alleges that it would have been "obvious to combine" the references cited in

"Rider I" with "the cited references" because "they are all directed to providing music for

playback" and "enhancing playback by providing music for playback on multiple grouped

devices, to playback music in synchrony and/or stereo." Sonos disagrees.

As an initial matter, it appears that Google meant to rely on the references cited in "Rider

K" for "playback to multiple devices," not "Rider I," which Google relies on for "playback from

the cloud." Nevertheless, for each of the charted references, Google fails to identify anything

about the nature of the particular problem being solved in that charted reference, or anything else

in the teachings of that charted reference, that would evidence a motivating reason for a POSITA

at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in Rider K (or Rider I), at least some of which disclose completely different architectures, different protocols, and different types of devices.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider K (or Rider I) in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider K (or Rider I) with any other reference or that Google has even articulated a rational basis for any such combination. To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

3.   Playback Transfer

Google alleges that it would have been "obvious to combine" the references cited in "Rider J" with "the cited references" because "they are all directed to providing music for playback via one or more devices on a playback data network," and "simplifying the user experience by providing a selectable option to select a playback device, and displaying representations of available playback devices." Sonos disagrees.

For each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or anything else in the teachings of that charted reference, that would evidence a motivating reason for a POSITA at the time of the invention(s) to modify that charted reference and combine it with one or more references cited in

Rider J, at least some of which disclose completely different architectures, different protocols, and different types of devices.

Google also fails to identify any objective evidence as to why or how its charted references would have been combined with references cited in Rider J in a manner that would have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in Rider J with any other reference or that Google has even articulated a rational basis for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence or explanation, Sonos reserves the right to respond.

4.   Playback From the Cloud

Google alleges that it would have been "obvious to combine" the references cited in "Rider K" with "the cited references" because "they are all directed to providing music for playback via one or more devices on a playback data network," and "specific implementations regarding playback from the cloud, including communication with cloud servers to receive media on the playback device, and adding media from the cloud to playback devices." Sonos disagrees.

As an initial matter, it appears that Google meant to rely on the references cited in "Rider I" for "playback from the cloud," not "Rider K," which Google relies on for "playback to multiple devices." Nevertheless, for each of the charted references, Google fails to identify anything about the nature of the particular problem being solved in that charted reference, or

anything else in the teachings of that charted reference, that would evidence a motivating reason

for a POSITA at the time of the invention(s) to modify that charted reference and combine it

with one or more references cited in Rider I (or Rider K), at least some of which disclose

completely different architectures, different protocols, and different types of devices.

In fact, some references in Rider I expressly teach away from combining with another

reference identified by Google. *See, e.g.,* SONOS-SVG2-00059360 at 363 (disclosing that

"[t]here's no DNLA support" for "Nexus Q"). In this regard, a POSITA would have actually been

discouraged from making the combination that Google proposes.

Google also fails to identify any objective evidence as to why or how its charted references

would have been combined with references cited in Rider I (or Rider K) in a manner that would

have yielded the claimed inventions of the Asserted Patents. Instead, Google appears to rely on

hindsight knowledge of Sonos's claimed inventions to modify and combine the charted references

in a manner that achieves Google's desired result, which is improper.

Thus, Sonos disagrees that it would have been obvious to combine the references cited in

Rider I (or Rider K) with any other reference or that Google has even articulated a rational basis

for any such combination.

To the extent that Google is permitted to supplement its contentions with actual evidence

or explanation, Sonos reserves the right to respond.

5.   Google-Related Prior Art

Google alleges that "it would have been obvious to combine any one of the Google

related prior art with one another to arrive at the limitation because they all describe related and

interoperable systems." However, Google cites no evidence that these alleged "prior art"

references describe "related and interoperable systems," other than being developed and authored

by employees of the same company. This is not sufficient to substitute for the traditional

obviousness analysis. Indeed, the mere fact that two patents or patent publications name a

common inventor or name employees at the same company would not have suggested or even

provided a sufficient motivation to a POSITA to combine features from these patents or patent

publications.

Thus, Sonos disagrees that it would have been obvious to combine teachings from any

"Google related prior art" or that Google has even articulated a rational basis for any such

combination.

To the extent that Google is permitted to supplement its contentions with actual evidence

or explanation, Sonos reserves the right to respond.

V.   Response to Google's Contentions Under 35 U.S.C. §102(f)

Google contends that the asserted claims of the '033 and '615 Patents are allegedly

invalid under § 102(f) because "Sonos derived the claimed functionality from Google…."

Google's Invalidity Contentions at 48, 62. Google's allegations are meritless for various

reasons.

As an initial matter, derivation requires Google to prove both (1) prior conception of the

claimed inventions by another and (2) communication of that prior conception to the inventors

that is "sufficient to enable [the inventors] to construct and successfully operate the

invention[s]." *Int'l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1376–77 (Fed. Cir. 2004)

(quoting *Gambro Lundia AB v. Baxter Healthcare Corp.,* 110 F.3d 1573, 1577 (Fed.Cir.1997)).

"Conception is the formation in the mind of the inventor of a definite and permanent idea of the

complete and operative invention, as it is therefore to be applied in practice." *Singh v. Brake*, 317

F.2d 1334, 1340 (Fed. Cir. 2003). In this regard, conception must encompass all limitations of

the claimed inventions. *Id.* Here, Google has failed to prove by clear and convincing evidence

that another inventor conceived "a definite and permanent idea of the complete and operative

invention," let alone prove communication of that prior conception to the inventors.

Indeed, Google merely alleges that "Sonos derived the claimed functionality from Google

based on its collaborations with Google relating to implementation of 'cloud queue,' as shown,

e.g., by Sonos's amendment in November 2019 to add a 'remote playback queue' to the claims

which was not supported by the original specification." Google's Invalidity Contentions at 48.

Even if true, § 102(f) requires Google to prove the "complete" conception of the ***claimed***

inventions, not merely that it allegedly conceived a ***claimed element*** (i.e., "remote playback

queue") recited in the '033 Patent claims. *See Singh*, 317 F.2d at 1340. Google has failed to do

so here.

In any event, the claims of the '615 Patent do not recite a "remote playback queue"

limitation, let alone a "cloud queue" limitation. In fact, the '615 Patent issued on May 8, 2018 –

more than a year before the 2019 amendment concerning "remote playback queue," which

Google alleges is the first time that Sonos introduced the notion of a "cloud queue" into its

patents. Accordingly, despite the fact that Google's derivation claims purportedly apply to both

the '615 and '033 Patents, it is impossible for Google's argument to apply to the '615 Patent.

Not surprisingly, the Court agrees. *See* Dkt. No. 111 at 7 ("Google has provided insufficient

factual matter to state a claim that Sonos impermissibly incorporated Google's cloud queue

technology into the '615 patent.").

Further, § 102(f) requires "prior" conception by another. The '033 and '615 Patents were

conceived by July 15, 2011, and reduced to practice by December 30, 2011. *See* Sonos's

Responses and Objections to Respondents' First Set of Interrogatories (No. 1). However,

Google alleges that it was the first one to come up with the concept of a "cloud queue" because Google allegedly told a Sonos engineer, Tad Coburn, about the idea in *2013*. *See* Google's Invalidity Contentions at 48-49.[15] The'033 and '615 Patents would not have been duly issued by the USPTO if its claims were not supported by their 2011 specification. *See* 35 U.S.C. § 282 ("A patent shall be presumed valid."). In other words, the "remote playback queue" limitation could not have been added to the '033 Patent claims unless it was supported by the 2011 specification. And since the "remote playback queue" limitation is supported by a patent specification filed by Sonos in *2011*, it could not have been invented by Google (or anyone else) during the 2013-2015 collaboration period.

Besides, § 102(f) requires prior conception "by another." The concept of a "cloud queue" was expressly disclosed *by Sonos* well before the Sonos-Google collaboration began and prior to when Google alleges to have told Sonos this "new" idea. For instance, Sonos's U.S. Pat. No. 9,232,277, filed on July 17, 2013, expressly references this "cloud queue" concept. *See, e.g.*, *id.* at 15: 47-50 ("In other embodiments, playback *queues*, including the first playback *queue*, are stored *remotely* relative to the playback device. For example, the first playback *queue* may be stored in a *cloud-based* network or on a second playback device for access by the playback device.") (emphasis added). As another example, Sonos's U.S. Pat. No. 9,674,587, filed on June 26, 2012, expressly references this concept as well. *See, e.g.*, *id.* 14:36-41 ("a playback *queue* may be stored *remotely* over the Internet in memory on a '*cloud* server' or network storage

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[15] While Google cites to an inadvertent reference to Sonos's "cloud queue" patents by counsel during a previous status conference with the Court, the '033 Patent is, and has consistently been, referred to by Sonos as "direct control" patents. *See, e.g.,* Dkt. No. 60 at 2 ("Sonos's '615 and '033 Patents (the "Direct Control Patents") . . ."). The phrase "cloud queue" does not appear anywhere in the 2011 specification, the claims of the '033 Patent, in Sonos's infringement complaint in the Texas Action, or in Sonos's infringement contentions.

device. For example, the SONOS™ server 720 in FIG.7 may be used to store one or more playback queues for SONOS™ systems 760 and 770."). In short, Google cannot claim to have conceived a "cloud queue" during the parties' collaboration because Sonos had already invented it beforehand.

For at least the foregoing reasons, Google has failed to prove its prior conception of the claimed inventions by Google, let alone prove communication of that prior conception to the inventors.

Google further contends that the asserted claims of the '033 and '615 Patents are allegedly invalid under § 102(f) because "Sonos derived the claimed invention from Spotify, including but not limited to its collaboration and integrations with Spotify described in Exs. 033-6 and 033-7," and "Sonos derived the claimed invention from Apple and its Airplay functionality, including but not limited to its discussions with Apple in 2011 and related to the functionality described in Ex. 033-5." Google's Invalidity Contentions at 48, 63. Google's allegations here are objectively baseless.

As an initial matter, Google failed to establish that its "Airplay System," "Sonos5 System," and "Spotify System" that allegedly incorporates "Spotify Connect" even qualify as prior art under 35 U.S.C. § 102(g). Google has also failed to establish that these purported systems embodied each and every claim limitation recited in the asserted claims.

Indeed, Google's reliance on Ex. 033-7 is astonishing given that Google's "Spotify System" that allegedly incorporates "Spotify Connect" comprises documents/things for several different systems from different entities that did not incorporate "Spotify Connect" in their respective systems until after September 2013 when Spotify first announced "Spotify Connect." In this regard, Google's "Spotify System" described in Ex. 033-7 cannot evidence "prior"

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conception. What's more, Google has failed to explain how the "Sonos5 System" described in Ex. 033-6 reference could possibly prove prior conception of the claimed inventions *by another*.

Moreover, Ex. 033-5 ("Airplay System") does not describe any communication between Sonos and Apple, let alone communication regarding prior conception. Likewise, while Google references Ex. 033-6 ("Sonos5 System") and Ex. 033-7 ("Spotify System") as allegedly evidencing "collaboration and integrations with Spotify," both exhibits fail to describe any communication between Sonos and Spotify, let alone communication regarding prior conception. In this regard, Google has failed to offer any plausible explanation as to how Sonos could have possibly derived the claimed inventions from Spotify and Apple.

For at least the foregoing reasons, Google has failed to prove prior conception by another, let alone complete conception of the claimed inventions by another. Because Google has failed to prove prior conception by another, Google has also failed to prove communication of prior conception to the inventors as required by §102 (f).

VI.   Response to Google's Contentions Under 35 U.S.C. § 112

A.   '966 and '885 Patents

Google summarily contends that the asserted claims of the '966 and '885 Patents are invalid under § 112, ¶ 1 because "the specification and original patent application fail to provide an enabling disclosure of and written description support." Google's Invalidity Contentions at 19, 26. Google then lists the claim limitations recited below without any explanation as to why those claim limitations do not satisfy § 112, ¶ 1. In this regard, Google has failed meet its burden of proof.

Moreover, the written description requirement does not require the specification of a patent to provide the exact language support for the claim limitations. P*urdue Pharma L.P. v.*

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Faulding Inc., 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue."). And contrary to Google's conclusory assertions, the '966 and '885 Patents enabled a POSITA at the time the claimed inventions to make and use the claimed inventions without undue experimentation, and the '966 and '885 Patents reasonably convey to a POSITA that the inventor had possession of the claimed inventions. Indeed, at least the following exemplary citations from the common specification provide ample support for the claim limitations identified by Google.

- "zone player"
  - *See, e.g.,* '966 Patent at 4:39-6:27, FIGs. 1, 2A.

- "zone scene" / "displaying a representation of the first zone scene and a representation of the second zone scene"
  - *See, e.g.,* '885 Patent at 2:19-20, 2:36-42, 3:26-31, 5:16-17, 5:65-6:4, 6:24-25, 7:35-38, 7:60-65, 8:29-9:20, 9:64-10:19, 10:36-63, FIG. 5A-B; '407 Provisional at ¶¶ 61, 63-66, 69, 72-73, 75, Appx. A at 2, 10.

- "networked media playback system"
  - *See, e.g.,* '966 Patent at 3:14-25, 4:39-5:20, FIG. 1.

- "configured to play back media individually" / "operating in a standalone mode"
  - *See, e.g.,* '966 Patent at 3:26-31, 6:8-27, 6:39-43, 6:64-7:25.

- "based on the second request, i) causing creation of the second zone scene, ii) causing an indication of the second zone scene to be transmitted to the first zone player, and iii) causing storage of the second zone scene" / "causing storage"
  - *See, e.g.,* '966 Patent at 10:30-11:11, FIG. 6; '885 Patent at 2:19-20, 2:36-42, 3:26-31, 5:16-17, 5:65-6:4, 6:24-25, 7:35-38, 7:60-65, 8:29-9:20, 9:64-10:19, 10:36-63, FIG. 5A-B; '407 Provisional at ¶¶ 61, 63-66, 69, 72-73, 75, Appx. A at 2, 10.

- "second predefined grouping of zone players including at least the first zone player and a third zone player that are to be configured for synchronous playback of media when the second zone scene is invoked" / "predefined grouping of zone players" / "based on the third request, causing the first zone player to transition from operating in the standalone mode to operating in accordance with the first predefined grouping of zone players such that the first zone player is configured to coordinate with at least the second zone player to output media in synchrony

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with output of media by at least the second zone player" / "transition from operating in the standalone mode to operating in accordance with the first predefined grouping of zone players" / "first zone player is configured to coordinate with at least the second zone player to output media in synchrony with output of media by at least the second zone player" / "first zone player is configured to coordinate with at least one other zone player in the given one of the first and second predefined groupings of zone players over a data network in order to output media in synchrony with output of media by the at least one other zone player in the given one of the first and second predefined groupings of zone players" / "cease[/ceasing] to operate in accordance with the first predefined grouping of zone players" / "begin[/beginning] to operate in accordance with the second predefined grouping of zone players" / "first zone player is configured to coordinate with at least the third zone player to output media in synchrony with output of media by at least the third zone player"

- o *See, e.g.,* '966 Patent at 3:26-31, 6:8-27, 6:39-43, 6:64-7:25, 10:30-11:11, FIG. 6; '885 Patent at 2:19-20, 2:36-42, 3:26-31, 5:16-17, 5:65-6:4, 6:24-25, 7:35-38, 7:60-65, 8:29-9:20, 9:64-10:19, 10:36-63, FIG. 5A-B; '407 Provisional at ¶¶ 61, 63-66, 69, 72-73, 75, Appx. A at 2, 10.

- "invoked" / "invoke"
  - o *See, e.g.,* '966 Patent at Abstract, 2:41-51, 3:1-25, 9:64-10:3, 10:53-58.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its contentions.

Google also summarily contends that the claim limitations recited above are allegedly indefinite under § 112, ¶ 2. *See* Google's Invalidity Contentions at 20-21, 27. However, Google has not raised the alleged indefiniteness of these terms pursuant to Patent Local Rule 4-2(a). As such, Google has forfeited such arguments and Sonos need not respond further to such contentions.

Moreover, Google has failed to articulate why the foregoing claim limitations, viewed in light of the specification and prosecution history, do not inform a POSITA about the scope of the claim limitations with reasonable certainty. In this regard, Google has failed meet its burden of proof. Besides, in light of the specification, prosecution history, and the knowledge of a POSITA, the claim limitations recited above are sufficiently definite. *See, e.g.,* citations above.

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Sonos reserves the right to rebut any further explanation that Google may provide in support of its indefiniteness contentions to the extent Google is permitted to continue arguing indefiniteness.

Further, Google summarily contends the claim limitations that recite "cause" and "causing" are "functional and thus are subject to § 112 ¶ 6 requirements and are indefinite for lack of structures in the specification, and are also not enabled because of the lack of structures." *See* Google's Invalidity Contentions at 21, 28. However, Google has failed to identify these terms as being governed by § 112, ¶ 6 in direct violation of Patent Local Rule 4-2(a). As such, Google has forfeited this alleged indefiniteness contention, and Sonos need not respond further to such contention. Nevertheless, Sonos has endeavored to respond to Google's conclusory contention as best it can understand, given what short shrift Google has paid such contention.

As an initial matter, Google provides no rationale for its conclusory contention under § 112 ¶ 6. Thus, Google has failed meet its burden of proof.

Moreover, it is well settled law that apparatus claims may properly claim recited components by describing their function or capabilities, and that the use of such functional language does not render them indefinite. *Halliburton Energy Servs. v. M--I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008); *Microprocessor Enhancement Corp. v. Texas Instruments Inc.*, 520 F.3d 1367, 1375 (Fed. Cir. 2008); *K--2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1363 (Fed. Cir. 1999)); *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1313 (Fed. Cir. 2017); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 826 (Fed. Cir. 2016); *HTC Corp. v. IPCom GmbH & Co., KG*, 667 F.3d 1270, 1277 (Fed. Cir. 2012).

For example, the Federal Circuit has recently held that apparatus claims that recite active verbs, such as "presents, receives, and generates," represent "permissible functional language

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used to describe capabilities of the [claimed apparatus]" because while such claims "make reference to user selection, they do not explicitly claim the user's act of selection, but rather, claim the system's capability to receive and respond to user selection." *MasterMine Software, Inc. v. Microsoft Corp.*, 874 F.3d 1307, 1315-16 (Fed. Cir. 2017); se*e also, e.g., UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 826 (Fed. Cir. 2016) (holding that the claims at issue are not invalid as indefinite because they claim a handheld device with an image sensor capable of generating data, recite sufficient structure for that capability.); *HTC Corp. v. IPCom GmbH & Co., KG, 667 F.3d 1270, 1277 (Fed. Cir. 2012)* (finding that the claims at issue "do not recite a mobile station and then have the mobile station perform the six enumerated functions," and "the claims merely establish those functions as the underlying network environment in which the mobile station operates."). As such, no asserted claim is indefinite under § 112, ¶ 6.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its indefiniteness contentions to the extent Google is permitted to continue arguing indefiniteness.

B.   '033 Patent

Google summarily contends that the asserted claims of the '033 Patent are invalid under § 112, ¶ 1 because "the specification and original patent application fail to provide an enabling disclosure of and written description support." Google's Invalidity Contentions at 57. Google then lists the claim limitations recited below without sufficient explanation as to why those claim limitations do not satisfy § 112, ¶ 1. In this regard, Google has failed meet its burden of proof.

Moreover, as noted above, the written description requirement does not require the specification of a patent to provide the exact language support for the claim limitations. P*urdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("In order to satisfy the

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written description requirement, the disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue."). And contrary to Google's assertions, the '033 Patent enabled a POSITA at the time the claimed inventions to make and use the claimed inventions without undue experimentation, and the '033 Patent reasonably conveys to a POSITA that the inventors had possession of the claimed inventions. Indeed, at least the following exemplary citations from the specification provide ample support for the claim limitations identified by Google.

- "remote playback queue"
  - *See, e.g.,* '033 Patent at 2:61-3:23, 12:6-13:19, 13:20-27, 15:14-28, 15:64-16:15, 16:59-67, 17:8-16, FIGs. 6, 7.

- "detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device" / "after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue"
  - *See, e.g.,* '033 Patent at Abstract, 2:20-27, 2:61-3:23, 12:6-14:25, 15:14-28, 15:34-16:67, 17:1-16, FIG. 7; *see also* citations for "remote playback queue."

- "based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item" / "wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service"
  - *See, e.g.,* '033 Patent at Abstract, 2:20-27, 2:61-3:23, 5:29-6:6, 7:7-11, 7:29-8:21, 8:31-55, 9:15-26, 9:54-62, 10:59-11:8, 11:9-12, 11:50-12:4,

12:6-14:15, 15:9-28, 15:34-53, 15:54-16:67, 17:1-16, FIGs. 6, 7; *see also* citations for "remote playback queue"

- "while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue" / "wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices" / "wherein displaying the representation of the one or more playback devices comprises: displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred" / "before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue"
  - *See, e.g.,* '033 Patent at 2:9-3:23, 3:49-4:60, 4:61-5:19, 5:20-6:12, 6:60-7:3, 8:21-26, 9:19-10:13, 10:18-31, 10:59-11:22, 12:6-10, 12:16-35, 12:41-50, 12:65-13:19, 13:20-27, 13:38-50, 13:56-14:40, 15:14-28, 15:46-53, 15:63-16:4, 16:16-38, 16:59-67, 17:1-16, FIGs. 1, 6, 7.

Google argues further that "the phrase 'remote playback queue' is entirely absent from the specification and was only added to the pending claims during prosecution in November 2019. The specification does not describe a 'remote playback queue' nor provide enabling disclosure to one of ordinary skill in the art." As noted above, the written description requirement does not require the specification of a patent to provide the exact language support for the claim limitations. *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue."). As set forth above, the '033 Patent provides ample support for the "remote playback queue" limitation. As one example, the '033 Patent explains that:

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> Certain embodiments allow a third party application to override a local playback queue with its own application-specific queue. The local playback system periodically fetches a short list of tracks to play next. The list of tracks to play is determined by the third-party application, for example. In certain embodiments, *a shared queue is provided between the local playback system and the third party application* to keep the local system and application synchronized.

'033 Pat. at 16:59-67. As explained, the patent discloses the concept of a third-party application overriding a local playback queue with something specific to the third-party application, namely an "application-specific queue." *Id.* Moreover, the patent discloses the concept of a "shared queue" that is "provided between" the local playback system and the third-party application, which is utilized to keep the local system and the application synchronized with respect to the contents of the queue. The patent further discloses that "a local playback system" can be controlled "from outside a household or other location at which the local playback network is configured." *Id.* at 17:8-11. The patent explains that "a user can *queue up* music while away from his or her house." Thus, the '033 Patent provides ample support for the "remote playback queue" limitation and these teachings, among the others identified above, demonstrate that the inventors were in possession of the "remote playback queue" limitation at the time of filing.

Google argues that the '033 Patent "includes absolutely no mention of a 'first mode' or a 'second mode,' let alone how the claim system is configured for or transitions from one mode to another, or how the computing device enters a mode in which it is 'no longer configured for playback of the remote playback queue.'" As set forth above, the '033 Patent provides ample support for these limitations. As one example, the '033 Patent explains that "[c]ertain embodiments facilitate streaming or otherwise providing music from a music-playing application (e.g., browser-based application, native music player, other multimedia application, and so on) to a multimedia content playback (e.g., Sonos™) system." *Id.* at 2:20-24. The '033 Patent further explains that the system can "identify multimedia content from the multimedia content source;

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pass information regarding the multimedia content to device on the local playback network in response to a trigger; and facilitate play of the multimedia content via the devices on the local playback network." *Id.* at 3:19-23. For instance, the '033 Patent explains that "[a] third party application can open or utilize an application programming interface (API) to pass music to the household playback system without tight coupling to that household playback system." *Id.* at 12:60-64. The '033 Patent more specifically explains:

> [A] user enjoys ***listening to music*** on an online music service (e.g., turntable.fm or other virtual room that a user can enter to choose from a plurality of online disc jockeys (DJs) deciding what to play next) ***using his Mac Book Pro***™ at home. He likes the unique user experience the service offers, and he frequently hops from room to room discovering new music. To maximize sound quality, he plays the music on his household playback system (e.g., Sonos™). A button or other indicator can be added to the turntable.fm Web application to ***switch the content being played to the playback system for output*** (e.g., to the Sonos™ system ***rather than*** or in addition to ***the Mac Book***™).

Id. at 12:66-13:11. The '033 Patent also explains that "when the link is selected, a playback system (e.g., Sonos™) server is contacted and provided with information regarding selected content for playback . . . using the provided information, the server identifies and provides the content locally on a user's local playback system. For example, the server can then start playing the music directly on the user's Sonos™ system (e.g., without going through a Sonos™ controller application)." *Id.* at 15:18-28. Still further, the '033 Patent explains that when a user "***selects an option*** to continue playing that channel on her household music playback system (e.g., Sonos™)," the "playback system ***picks up from the same spot*** on the selected channel that was on her phone and outputs that content." *Id.* at 12:41-46. Thus, the '033 Patent provides ample support for these limitations, and these teachings, among the others identified above, demonstrate that the inventors were in possession of these limitations at the time of filing.

Google argues that the '033 Patent "does not include any discussion of 'transmitting an instruction,' let alone one that 'configures the at least one given playback device' in the manner described in the claims. As set forth above, the '033 Patent provides ample support for this limitation. As one example, the '033 Patent explains that:

> [W]hen the link is selected, a playback system (e.g., Sonos™) server is contacted and provided with information regarding selected content for playback. For example, rather than launching a local controller application, a server is contacted regarding music for playback on a local network. At block 1030, using the provided information, the server identifies and provides the content locally on a user's local playback system.

Id. at 15:18-25. As another example, the '033 Patent explains that "a third party application provides a multimedia playback device (e.g., a Sonos™ zone player (ZP)) with enough information about content (e.g., an audio track) so that, at block 1120, the local playback system (e.g., SonosNet™) can directly access a source of the content and, at block 1130, play the content directly off the network (e.g., the Internet) or cloud." *Id.* at 15:47-53. The '033 Patent also explains that "information is provided from a third party application to a local playback system without being routed through or by a controller application. Here, the third party application is communicating with the multimedia playback device (e.g., a Sonos ZonePlayer™)." *Id.* at 16:5-15. The '033 Patent also explains that "[a] connection between the third-party application and the local playback device (e.g., Sonos ZonePlayer™) can be direct over a local area network (LAN), remote through a proxy server in the cloud, and so on." *Id.* at 15:64-67. Thus, the '033 Patent provides ample support for these limitations, and these teachings, among the others identified above, demonstrate that the inventors were in possession of these limitations at the time of filing.

Google argues that the '033 Patent does not disclose "the use of a 'selectable indicator,'" or "displaying the representation of the one or more playback devices . . ." As set forth above,

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the '033 Patent provides ample support for this limitation. As one example, the '033 Patent

explains that "a user listens to a third party music application (e.g., Pandora™ Rhapsody™,

Spotify™, and so on) on her smart phone while commuting. She's enjoying the current channel

and, as she walks in the door to her home, *selects an option* to continue playing that channel on

her household music playback system (e.g., Sonos™)." *Id.* at 12:41-46. As another example,

the '033 Patent explains "[a] button or other indicator can be added to the turntable.fm Web

application to switch the content being played to the playback system for output (e.g., to the

Sonos™ system rather than or in addition to the Mac Book™)." *Id.* at 13:7-11. As yet another

example, the '033 Patent explains:

> [A] "Play to Sonos" button is pressed on a Rhapsody™ application. At block 820,
> content is streamed to one or more components in a household playback network.
> The music may be streamed to predetermined zones or players in a household, for
> example. The music may be further directed to be played in different zones or
> players throughout the household. Playback on the local network can be facilitated
> to one or more zones/players based on a configuration (e.g., a zone scene, theme,
> and so on). Thus, certain embodiments allow a large degree of flexibility in where
> the music is actually played. For example, the music can be played in the kitchen,
> the family room, the patio, and so on. Further, the music may be redirected to
> different zones.

Id. at 13:63-14:9. As yet a further example, the '033 Patent explains:

> Certain embodiments facilitate control of a local playback system from outside a
> household or other location at which the local playback network is configured. For
> example, a user can queue up music while away from his or her house. The
> application can facilitate setup and/or configuration. . . . The application can then
> make a request to a Sonos server in the cloud to determine the zone groups on which
> music can be played.

Id. at 17:8-16.

Thus, the '033 Patent provides ample support for these limitations, and these teachings,

among the others identified above, demonstrate that the inventors were in possession of these

limitations at the time of filing.

Google also argues that "there is no written description support for the full scope of the claims because Sonos's infringement contentions expand the scope of the claims far beyond what the inventors were in possession of." Google then posits that "the claimed inventors were not in possession of the cloud queue functionality that purported falls within the scope of the claims." As best as Sonos can understand of this two-sentence argument, Google seems to be arguing that there is no express disclosure of the precise embodiment that Sonos accuses of infringement.

This argument finds no support in the law. It has been a hallmark of patent law that, "to satisfy the written description requirement, an applicant is not required to describe in the specification every conceivable and possible future embodiment of his invention." *Lochner Techs., LLC v. Vizio, Inc., 567 F. App'x* 931, 939 (Fed. Cir. 2014) (citation omitted); *SRI Int'l v. Matsushita Elec. Corp. of Am.*, 775 F.2d 1107, 1121 (*en banc*) (Fed. Cir. 1985) (same, explaining that "[t]he law does not require the impossible. Hence, it does not require that an applicant describe in his specification every conceivable and possible future embodiment of his invention. The law recognizes that patent specifications are written for those skilled in the art, and requires only that the inventor describe the 'best mode' known at the time to him of making and using the invention."); *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003) (same, explaining further that a "specification may, within the meaning of 35 U.S.C. § 112 para. 1, contain a written description of a broadly claimed invention without describing all species that [the] claim encompasses," and "it is a familiar principle of patent law that a claim need not be limited to a preferred embodiment.") (internal quotations omitted).

Courts routinely reject the proposition Google appears to advance, namely that claims are limited to the embodiments disclosed in the specification. *E.g., Optis Wireless Tech., LLC v.*

Apple Inc., Case No. 19-cv-0066, 2020 WL 1692968, at *10 (E.D. Tex. Apr. 7, 2020) (declining to "limit the claims to the disclosed embodiments identified by Defendant," explaining that "the claims rather than the embodiments define the invention…. Defendant's argument that limiting the claims to the embodiments is necessary to satisfy the written description and enablement requirements is not persuasive."); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1323, 1327 (explaining "although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments," and "we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction").

Contrary to Google's contention, the proper analysis should not focus on whether every conceivable embodiment finds in *haec verba* support in the specification, but rather should focus on whether the specification reasonably conveys to those skilled in the art that the inventors had possession of the claimed subject matter as of the filing date." *See Indivior Inc. v. Dr. Reddy's Labs., S.A.*, 930 F.3d at 1347; *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d at 1345. There is ample support in the '033 Patent for the "remote playback queue" limitation. *See, e.g.*, '033 Patent at 2:61-3:23, 12:6-13:19, 13:20-27, 15:14-28, 15:64-16:15, 16:59-67, 17:8-16, FIGs. 6, 7.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its contentions.

Google also summarily contends that some of the claim limitations recited above are allegedly indefinite under § 112, ¶ 2. *See* Google's Invalidity Contentions at 60. However, Google has not raised the alleged indefiniteness of those terms pursuant to Patent Local Rule 4-2(a). As such, Sonos need not respond further to such contentions.

Moreover, Google has failed to sufficiently articulate why the foregoing claim limitations, viewed in light of the specification and prosecution history, do not inform a POSITA about the scope of the claim limitations with reasonable certainty. In this regard, Google has failed meet its burden of proof. Besides, in light of the specification, prosecution history, and the knowledge of a POSITA, the claim limitations identified by Google are sufficiently definite. *See, e.g.,* citations above.   Further, Sonos has previously addressed its position regarding the terms "an instruction for the at least one given playback device to take over responsibility for playback" and "wherein the instruction comprises an instruction." *See, e.g., Sonos Inc. v. Google LLC,* Case No. 20-CV-881, Dkt. No. 60, at 28-30 (W.D. Tex. Apr. 27, 2021); *id.* at Dkt. No. 66, 14-15.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its indefiniteness contentions to the extent Google is permitted to continue arguing indefiniteness.

C.   '615 Patent

Google summarily contends that the asserted claims of the '615 Patent are invalid under § 112, ¶ 1 because "the specification and original patent application fail to provide an enabling disclosure of and written description support." Google's Invalidity Contentions at 66. Google then lists the claim limitations recited below without sufficient explanation as to why those claim limitations do not satisfy § 112, ¶ 1. In this regard, Google has failed meet its burden of proof.

Moreover, as noted above, the written description requirement does not require the specification of a patent to provide the exact language support for the claim limitations. P*urdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) ("In order to satisfy the written description requirement, the disclosure as originally filed does not have to provide *in*

haec verba support for the claimed subject matter at issue."). And contrary to Google's

assertions, the '615 Patent would have enabled a POSITA at the time the claimed inventions to

make and use the claimed inventions without undue experimentation, and the ' 615 Patent

reasonably conveys to a POSITA that the inventors had possession of the claimed inventions.

Indeed, at least the following exemplary citations from the specification provide ample support

for the claim limitations identified by Google.

- "local playback queue"
    - *See, e.g.,* '615 Patent at 10:3-8, 10:42-46, 11:12-14, 11:62-12:3, 13:22-40, 14:50-52, 15:12-16, 15:58-67, 16:20-35, 16:53-17:15.

- "causing the graphical interface to display a selectable option for transferring playback from the control device" / "detecting a set of inputs to transfer playback from the control device to a particular playback device, wherein the set of inputs comprises: (i) a selection of the selectable option for transferring playback from the control device and (ii) a selection of the particular playback device from the identified playback devices connected to the local area network"
    - '615 Patent at 1:66-3:13, 3:38-43,4:53-5:11, 5:12-66, 9:14-38, 9:44-67, 10:56-11:20, 12:8-12, 12:18-53, 13:1-22, 13:22-30, 13:41-53, 13:60-14:43 15:18-32, 15:38-57, 16:1-8, 16:20-42, 16:63-17:20, FIG. 1.

- "causing one or more first cloud servers to add multimedia content to a local playback queue on the particular playback device, wherein adding the multimedia content to the local playback queue comprises the one or more first cloud servers adding, to the local playback queue, one or more resource locators corresponding to respective locations of the multimedia content at one or more second cloud servers of a streaming content service"
    - *See, e.g.,* '615 Patent at 2:10-17, 2:51-3:13, 5:21-66, 6:64-66, 7:21-8:14, 9:10-21, 9:49-57, 10:54-11:5, 11:6-9, 11:49-12:3, 12:5-14:18, 15:13-32, 15:38-57, 15:58-17:4, 17:5-20, FIGs. 6, 7.

- "causing an identifier of the multimedia content to be added to the local playback queue, wherein the identifier indicates a particular source of the multimedia content at the one or more second cloud servers of the streaming content service, wherein the particular playback device receives the multimedia content from the particular source at the one or more second cloud servers of the streaming content service" / "wherein causing one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device comprises sending a message to the streaming content service that causes the one or more first cloud servers to add the multimedia content to the local playback queue on the particular playback device"

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- o *See, e.g.,* '615 Patent at 2:10-17, 2:51-3:13, 5:21-66, 6:64-66, 7:21-8:14, 9:10-21, 9:49-57, 10:54-11:5, 11:6-9, 11:49-12:3, 12:5-14:18, 15:13-32, 15:38-57, 15:58-17:4, 17:5-20, FIGs. 6, 7.

- • "causing playback at the control device to be stopped" / "wherein transferring playback from the playback device back to the control device comprises: causing playback at the playback device to be stopped; and modifying the one or more transport controls of the control interface to control playback by the control device"
  - o *See, e.g.,* '615 Patent at 12:31-67, 13:1-22, 13:36-53, 13:60-14:43 15:18-32, 15:38-67, 16:1-8, 16:13-31, 16:53-17:20.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its contentions.

Google argues that "the '615 patent fails to provide written description support for the specific limitations that relate to adding items to the local playback device." Google does not identify what specific limitations it is referring to here. As set forth above, the '615 Patent provides ample support for the local playback queue limitation.

Google next argues that "the specification does not support a first cloud server that adds multimedia content to a local playback queue on the device, or URLs to the local playback device." As set forth above, the '615 Patent provides ample support for this limitation. As one example, the '615 Patent explains "[a]t block 1030, using the provided information, the server identifies and provides the content locally on a user's local playback system." *Id.* at 15:27-29. Further, the '615 Patent explains "[a] uniform resource indicator (URI) (e.g., a uniform resource locator (URL) can be passed to a playback device to fetch content from a cloud and/or other networked source, for example. . . . Once the zone player has a URL (or some other identification or address) for a song and/or playlist, the zone player can run on its own to fetch the content. Songs and/or other multimedia content can be retrieved from the Internet . . . ." *Id.* at 12:53-63. Further yet, the '615 Patent explains:

> [A] third party application provides a multimedia playback device (e.g., a Sonos™ zone player (ZP)) with enough information about content (e.g., an audio track) so that, at block 1120, the local playback system (e.g., SonosNet™) can directly access a source of the content and, at block 1130, play the content directly off the network (e.g., the Internet) or cloud. . . . Information passed over to the local playback device may include an identifier for a single track, a playlist, a streaming radio station, a programmed radio station, and so on. . . . A connection between the third-party application and the local playback device (e.g., Sonos ZonePlayer™) can be direct over a local area network (LAN), remote through a proxy server in the cloud, and so on.

15:51-16:4.

Thus, the '615 Patent provides ample support for these limitations, and these teachings, among the others identified above, demonstrate that the inventors were in possession of these limitations at the time of filing.

Google also summarily contends that some of the claim limitations recited above are allegedly indefinite under § 112, ¶ 2. *See* Google's Invalidity Contentions at 67-68. However, Google has not raised the alleged indefiniteness of those terms pursuant to Patent Local Rule 4-2(a). As such, Sonos need not respond further to such contentions.

Moreover, Google has failed to articulate any reason as to why the foregoing claim limitations, viewed in light of the specification and prosecution history, do not inform a POSITA about the scope of the claim limitations with reasonable certainty. In this regard, Google has failed meet its burden of proof. Besides, in light of the specification, prosecution history, and the knowledge of a POSITA, the claim limitations identified by Google are sufficiently definite. *See, e.g.,* citations above.

Google also argues that "Sonos's infringement contentions as to ['local playback queue'] identify subject matter in the accused instrumentalities that is not disclosed and/or enabled in the '615 patent, and for which the specification does not objectively demonstrate to a person of skill in the art possession by the patent applicants. For instance, the claimed inventors were not in

possession of the cloud queue functionality that purported falls within the scope of the claims at

the time of the alleged invention." As an initial matter, Google fails to identify what "subject

matter in the accused instrumentalities" it is referring to here. As best as Sonos can understand

of this argument, Google seems to be arguing that there is no express disclosure of the precise

embodiment that Sonos accuses of infringement.

This argument finds no support in the law. It has been a hallmark of patent law that "to

satisfy the written description requirement, an applicant is not required to describe in the

specification every conceivable and possible future embodiment of his invention." *Lochner*

Techs., LLC v. Vizio, Inc., 567 F. App'x 931, 939 (Fed. Cir. 2014) (citation omitted); *SRI Int'l v.*

Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1121 (*en banc*) (Fed. Cir. 1985) (same,

explaining that "[t]he law does not require the impossible. Hence, it does not require that an

applicant describe in his specification every conceivable and possible future embodiment of his

invention. The law recognizes that patent specifications are written for those skilled in the art,

and requires only that the inventor describe the 'best mode' known at the time to him of making

and using the invention."); *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir.

2003) (same, explaining further that a "specification may, within the meaning of 35 U.S.C. § 112

para. 1, contain a written description of a broadly claimed invention without describing all

species that [the] claim encompasses," and "it is a familiar principle of patent law that a claim

need not be limited to a preferred embodiment.") (internal quotations omitted).

Courts routinely reject the proposition Google appears to advance, namely that claims are

limited to the embodiments disclosed in the specification. *E.g., Optis Wireless Tech., LLC v.*

Apple Inc., Case No. 19-cv-0066, 2020 WL 1692968, at *10 (E.D. Tex. Apr. 7, 2020) (declining

to "limit the claims to the disclosed embodiments identified by Defendant," explaining that "the

claims rather than the embodiments define the invention…. Defendant's argument that limiting the claims to the embodiments is necessary to satisfy the written description and enablement requirements is not persuasive."); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1323, 1327 (explaining "although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments," and "we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction").

Contrary to Google's contention, the proper analysis should not focus on whether every conceivable embodiment finds in *haec verba* support in the specification, but rather should focus on whether the specification reasonably conveys to those skilled in the art that the inventors had possession of the claimed subject matter as of the filing date." *See Indivior Inc. v. Dr. Reddy's Labs., S.A.*, 930 F.3d at 1347; *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d at 1345. There is ample support in the '615 Patent for the "local playback queue" limitation. *See, e.g.*, '615 Patent at 10:3-8, 10:42-46, 11:12-14, 11:62-12:3, 13:22-40, 14:50-52, 15:12-16, 15:58-67, 16:20-35, 16:53-17:15.

Sonos reserves the right to rebut any further explanation that Google may provide in support of its indefiniteness contentions to the extent Google is permitted to continue arguing indefiniteness.

VII.   Response to Google's Contentions Regarding Obviousness-Type Double Patenting

Google contends that the '966 and '885 Patents are allegedly invalid for obviousness-type double patenting in view of claims 1-3, 6-10, 12-15, and 17 of U.S. Patent No. 8,141,645. However, Google makes no effort, let alone prove by clear and convincing evidence, in showing that the asserted claims of the '966 and '885 Patents are not patentably distinct, which the

Federal Circuit has emphasized is a "heavy and unshifting burden." *Symbol Techs. Inc. v. Opticon, Inc.,* 935 F.2d 1569, 1580 (Fed.Cir.1991).

Specifically, the obviousness-type double patenting analysis involves two steps: first, the court construes the claim(s) in the earlier patent and the claim(s) in the later patent and determines the differences between the two; second, the defendant must demonstrate that, despite those differences, the earlier claim anticipates or renders obvious the later claim. *Abbvie Inc. v. Mathilda & Terence Kennedy Inst. of Rheumatology Tr.*, 764 F.3d 1366, 1374 (Fed. Cir. 2014). The defendant's burden is analogous to demonstrating that the prior art anticipates or renders obvious a claim under 35 U.S.C. § 102 or § 103, except that "the nonclaim portion of the earlier patent ordinarily does not qualify as prior art against the patentee." *See id.* at 1378-79 (quotation omitted).

Here, setting aside the fact that the '645 Patent claims and the asserted claims of the '966 and '885 Patent have not been construed to identify the differences, Google merely alleges that "[a]ny differences between the asserted claims of the [ ] '885, and '996 [P]atents and the '645 Patent claims were at least obvious based on one or more of the references in Exhibits 885-1— 885-10, 206-1—206-10 and 966-1 – 966-10 and/or the general knowledge of one skilled in the art." Google's Invalidity Contentions at 84. Such conclusory statement is insufficient to carry Google's burden. *See, e.g., Medtronic, Inc. v. AGA Med. Corp.*, Case No. 07-CV-567, 2009 WL 1163976, at *5 (N.D. Cal. Apr. 28, 2009) (finding that defendant "failed to address other than by the conclusory statement of its expert that the difference between such terms is a "design choice" or a "distinction without a difference," which is "insufficient to carry [defendant]'s burden on summary judgment with respect to the issue of OTDP.").

As noted above, Sonos had made its best effort to ascertain Google's deficient

contentions. Sonos reserves the right to revise, correct, add to, supplement, or clarify its

response to this Interrogatory as additional information is discovered and/or becomes available.